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***Manpower Requirements
and Hiring Plans of
Ontario Employers in
Manufacturing Industries***

Ontario Manpower Commission
October, 1979

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MANPOWER REQUIREMENTS AND HIRING PLANS OF ONTARIO EMPLOYERS IN MANUFACTURING INDUSTRIES

SURVEY RESULTS

Labour Market Information & Analysis
Office of the Secretariat
Ontario Manpower Commission
400 University Ave.
Toronto, Ontario M7A 1T7

October, 1979

Ontario Ministry of Labour
Miscellaneous publications

MANUFACTURERS AND IMPORTERS
OF COTTON FABRICS
MANUFACTURING STUDIOS

SURVEY RESULTS



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EXECUTIVE SUMMARY

1. Objectives

This report highlights the major findings of a manpower survey entitled "Manpower Requirements and Hiring Plans of Ontario Employers in Manufacturing Industries."

The purpose of this study was to obtain information on current shortages and the future skill requirements of employers in the manufacturing industries in Ontario. The survey also included additional questions on the wage rates and the minimum acceptable qualifications for shortage occupations; the number of unfilled positions; the number of workers currently employed in the shortage occupations, and the number retiring during the next five years; the degree of recruitment difficulty; and employers' perceptions of the specific reasons for these recruitment difficulties.

2. Survey Results

The data reported in this study were collected in a survey carried out during July and August 1979. The survey questionnaire was mailed by the Ontario Division of the Canadian Manufacturers' Association and the Canadian Federation of Independent Business to their members. Information was solicited from 5,770 employers, 3,083 of which are members of the CMA and 2,687 of which are members of the CFIB. In all, 1,153 employers responded to the survey.

This report presents the results of the survey for the province as a whole, for 33 major urban centres, and for 19 community college areas.

3. Current Shortages

Just under 50 percent (576) of the 1,153 respondents reported experiencing recruitment difficulties in a total of 250 occupations. These employers were attempting to fill just under 2,900 positions in these occupations. Though the number of job openings varies considerably from occupation to occupation, almost 68 percent of all positions were in the following broad occupations: Machine Operators (401); General Machinists (333); Tool/Die/Mould Makers (250); Labourers (189); Engineers (187); Welders (138); Assemblers (89); Welder Fitters (83); Assembler Fitters (81); Electricians (79), and Analysts (70).

More than 24 percent of the 401 openings for Machine Operators are for Lathe Operators (53) and Press/Brake/Punch Operators (45).

The majority of the positions for Lathe Operators are in medium-sized firms in the Machinery Industries. The Press/Brake/Punch Operators are mainly needed by medium-sized firms in the Metal Fabricating Industries.

Most of the 333 openings for General Machinist are either in large firms in the Transportation Equipment Industries or in medium-sized firms in the Metal Fabricating Industries.

Just over 45 percent of all openings for Tool/Die/Mould/Cabinet Makers are for Tool-and-Die Makers. Almost half of these Tool-and-Die Makers are required by the Machinery Industries, mostly in medium-sized firms.

More than 58 percent of all positions for Labourers are for Semi-Skilled Labourers. Most of these workers are required by medium-sized firms in the Electrical Products and Wood Industries.

Electrical and Industrial Engineers account for 46 percent of the 187 openings for Engineers. Most of the Electrical Engineers and Industrial Engineers are required by large firms in the Machinery and Chemical Products Industries.

Close to 85 percent of the 138 openings for Welders are for Industrial Welders. These welders are required mostly by large firms in the Machinery Industries and medium-sized firms in the Metal Fabricating Industries.

The job openings for Assemblers are distributed fairly evenly among General Production Assemblers, Electronic Assemblers, and Mechanical Assemblers. Most General Production Assemblers are required in large firms in the Electrical Products Industries and in medium-sized firms in the Wood Industries, most Electronic Assemblers are required by small firms in the Electrical Products Industries, and most Mechanical Assemblers are required by large firms in the Machinery Industries.

Most of the 83 Welder-Fitters are required either by medium-sized firms in the Metal Fabricating Industries or by large firms in the Machinery Industries.

More than 48 percent of all openings for Assembler Fitters are for Machine Tool Assembler Fitters. These positions are mainly required by large firms in both the Metal Fabricating and Machinery Industries.

Almost 56 percent of all openings for Electricians are for Wirer-Electricians. Three quarters of these Electricians are required by large firms in the Electrical Products Industries.

Over 91 percent of 70 openings for Analysts are for Systems Analysts. Most Systems Analysts are required by large firms in the Machinery Industries.

In terms of College Area almost 40 percent of the openings in the above occupations are located in the Toronto College Area, while most of the remaining openings are in the following College Areas: Sheridan (287), Conestoga (280), Mohawk (114) and Fanshawe (103).

4. Expansion Plans and Recruitment Outlook

A total of 617 firms (54 percent of respondents) are planning to expand their manpower during the next 12 months. A large proportion (68 percent) of the firms currently experiencing recruitment difficulties are also planning expansions, while only 39 percent of those not currently experiencing shortages plan to expand. This situation is particularly apparent in the Primary Metal, Metal Fabricating, Machinery, Transportation Equipment, and Construction Industries.

Among those firms currently experiencing recruitment difficulties and planning expansion the smaller the firm is the more likely it is to expect recruitment difficulties in the future. Among firms which are not currently experiencing recruitment difficulties but which are planning expansion medium-sized firms (20-99 employees) are most likely to anticipate recruitment difficulties in the future.

The great majority (88 percent) of firms planning expansion anticipate further recruitment difficulties in the future.

Though the reasons cited for recruiting to be "somewhat difficult" or "very difficult" vary considerably by occupation, a lack of specialized skills and a lack of on-the-job experience, whether separately or in combination, are cited more frequently than any other reason. This was particularly true for the following occupations: Cabinet Maker, Mould Maker, Tool and Die Maker, Millwright, Lathe Operator, Press/Brake/Punch Operator, Welder Fitter, General Electrician, Wirer Electrician, and Electrical Engineers.

A large number of respondents felt that there would be no applicants at all for several of the frequently cited future shortage occupations. At least one employer in five felt that this would be particularly true of Cabinet/Mould/Tool and Die Maker, Millwright, Lathe Operator, Press/Brake/Punch Operator, Welder Fitter, Electrician General, Electrician Wirer, and Electrical, Electronic, and R & D Engineers.

5. Employer Concerns and Special Problems

Out of the many hundreds of specific comments made by employers on the causes of their recruitment difficulty there emerges a virtual consensus on two main issues: a general lack of proper training in the industrial trades and a decline of the "work ethic" among young

people. Many employers think that the education system has failed to produce the industrial skills and problem-solving ability that they need; too much emphasis is being given to university training, and only the less-intelligent and ambitious students are being encouraged to enter trade courses. It is time, in their view, to inform students of the rewards to be found in the skilled trades and to raise the status of blue-collar work in the minds of the Canadian public.

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INTRODUCTION

Ontario employers have expressed increasing concern about the shortage of workers in certain occupations. At present their concern appears to be focused on shortages in the skilled trades, particularly those needed in the manufacturing sector. There is increasing evidence that the current shortages will worsen in the future as the flow of skilled immigrants declines and increasing demand is made on domestic resources. Some employers report that they have been forced to turn down new business because of a shortage of labour with certain critical skills.

To obtain a more accurate picture of labour shortages in the province a group of concerned industrialists approached the Ontario Minister of Labour, The Honourable Dr. Robert Elgie, and asked him to make the resources of the Labour Market Information and Analysis Unit available to develop a survey questionnaire on this subject. This survey was designed to assemble information from employers in the province about those occupations in which shortages had occurred in recent weeks and in which they are likely to occur during the next twelve months. The Ontario Division of the Canadian Manufacturers' Association and the Canadian Federation of Independent Business endorsed the survey and undertook to mail the questionnaires to their members in Ontario.

The results of the survey are now available and are outlined in this report as follows: Chapter I describes the methodology used in conducting the survey and the characteristics of the respondents; Chapter II contains the survey results for the province as a whole, with background material on the locations and importance of the various manufacturing industries; Chapter III presents the survey results for thirty-three major urban centres in the province; and Chapter IV presents the results for each of the regions served by Ontario's 22 Colleges of Applied Arts and Technology (CAATs).

CHAPTER I

METHODOLOGY

1. The Survey Questionnaire

Since the purpose of this study was to obtain up-to-date information on current shortages and the future skill requirements of employers by location throughout the province, it was necessary to use a questionnaire that would reflect the specific needs of each industry group and locality. The questionnaire that was designed for this study is divided into two main sections. The first asks for information on the number and locations of the branches, if any, of the responding firms; firms that had more than one branch were asked to reproduce one copy of the questionnaire for each of their branches so that local information could be gathered. The second part of the questionnaire asks for several kinds of information: the occupations employers have had difficulty filling during the four weeks before the questionnaire was returned,¹ how many jobs are available, the qualifications and skills required for these jobs, and the wages being offered; as well as the firm's expansion plans and occupations for which shortages are expected during the coming twelve months, and what actions employers are taking or expect to take to fill these positions. No information was solicited on planned reductions in employment, so the results presented here do not reflect the net expected change in employment in these firms.

This questionnaire contains both structured questions and an open-ended question. The structured questions were designed to ensure that the necessary information on occupation shortages was obtained in a form amenable to tabulation; the results of these questions appear in Chapters II, III, and IV under the headings "Current Shortages" and "Expansion Plans and Recruitment Outlook." The open-ended question inviting comments and suggestions was included to allow respondents to point out problems not covered elsewhere in the questionnaire; these comments are discussed in Chapters II, III, and IV under

¹The questionnaires were mailed on 25 June 1979, and responses were received until 7 September 1979. In the remainder of this report all references to "current" or "present" shortages will indicate shortages reported by employers as having occurred during the four weeks before their replies were submitted.

the heading "Employer Concerns and Special Problems." The complete questionnaire is reproduced in the Appendix.

The questionnaire was distributed by mail to 5,770 firms on the mailing lists of the Canadian Manufacturers' Association and the Canadian Federation of Independent Business. Though the survey was intended to include only manufacturing firms, a small proportion of the responses (4 percent) came from firms not engaged in manufacturing of any kind, such as wholesalers, some of whom are also members of these organizations.

2. The Aggregation of the Data

In order to make the results of this report useful for a wide variety of purposes the data were tabulated not only for Ontario as a whole but also for each major centre and CAAT region. In this report a "major centre" is defined as a city, town, or village whose population is at least 25,000. According to the 1976 Census of Population there are 38 centres of this size in Ontario. A few major centres that satisfy this criterion were omitted because they were close to other major labour market areas, with the result that 33 major centres are actually reported on. These centres are identified on the map on page 7.

Though there are 22 CAATs in the province the number of CAAT regions studied has been reduced to 19 on the assumption that the whole of Metropolitan Toronto constitutes a single labour market served jointly by four CAATs.

Three sources have been used to identify the predominant manufacturing activities in the various major centres: the 1975 Census of Manufactures, Scott's Industrial Directory of Ontario Manufactures (11th edition, 1978), and the 1978 Profile of Ontario Municipalities published by the Ontario Ministry of Industry and Tourism (MIT). Although the Census of Manufactures is the main source of data on employment by industry, Scott's Industrial Directory and the MIT Profile made it possible to update and verify information when necessary and to overcome the limitations imposed by the Statistics Canada Act, which prohibits the publication of employment data in cases where it would reveal confidential information about identifiable businesses.

For the purpose of statistical comparison each major centre selected for this report is deemed to fall into one of three Statistics Canada categories: Census Metropolitan Areas (CMAs), Census Agglomerations (CAs), and Specified Municipalities.

ties². The first two categories are designed by Statistics Canada to identify the main labour market in an urbanized core (typically including several municipalities) whose boundaries are defined according to the 1971 Census of Population. CMAs are areas having a population of more than 100,000 persons. CAs usually comprise at least two adjacent municipal entities whose combined population is less than 100,000 persons (e.g., Oshawa-Whitby). The boundaries of specified municipalities are defined in accordance with the Ontario Municipal Act.

3. The Rate of Response

The survey questionnaire was mailed to 5,770 firms, 3,083 of which are members of the CMA and 2,687 of which are members of the CFIB; 1,153 firms, or 20.0 percent, returned their questionnaires by the deadline date of 7 September 1979. Questionnaires were completed by 24.2 percent of the CMA members and 15.1 percent of the CFIB members.

Some of these figures will mislead the reader unless two points are kept in mind. First, since multi-branch firms were asked to send a copy of the questionnaire to each of their branches some multi-branch CMA and CFIB members returned more than one questionnaire: 132 responses were generated this way. Second, firms that are members of both the CMA and the CFIB returned only one questionnaire each even though they are counted twice on the combined CMA and CFIB mailing lists. Since these mailing lists are confidential and since the CMA and CFIB sent questionnaires separately to their own members there is no way of knowing how many such duplications occurred. However, the number of duplications in membership probably exceeds the number of multi-branch responses, so the actual rate of response should be higher than 20.0 percent.

The 1,153 responding firms employ a total of 248,788 workers. One hundred of these firms asked that their responses remain confidential at either the industry level or the community level. The results in this report at the local level are therefore based on responses from 1,053 firms employing a total of 195,898 workers, or approximately 21 per-

²For more precise definitions and descriptions of these terms see Statistics Canada, Catalogue 31-209 (Annual), Manufacturing Industries of Canada: Sub-Provincial Areas (1975); and Catalogue 92-712, Vol. 1, Part 1 (Bulletin 1.1-12), 1971 Census of Canada, Population, Reference Maps (1971).

cent of total provincial employment in manufacturing³. The results reported for the province omit only the 44 responses that are confidential at the industry level.

More than half the responses to the survey (52.3 percent) were from firms employing fewer than 50 workers, and almost half (46.0 percent) came from the following four industry groups:

- 20.3 percent of the responses (225 replies) came from the Metal Fabricating Industries. A majority (63.7 percent) of the responses from this industry were from small firms employing fewer than 50 workers each.
- 9.6 percent (107 replies) came from the Machinery Industries. Close to 42 percent of the respondents from this industry employ fewer than 50 workers each.
- 8.6 percent (95 replies) came from the Electrical Products Industries. Unlike the other industry groups, most (62.1 percent) of the returns from this industry group were from firms with more than 50 employees each.
- 7.5 percent (83 replies) came from Chemical Products Industries. 45.7 percent of the responses were from firms employing fewer than 50 workers each.

Relatively large returns were also received from the Wood Industries (6.6 percent), Printing and Publishing (5.2 percent), Food, Beverages and Tobacco (4.9 percent), and Transportation Equipment (4.8 percent). The majority of the respondents from each of these industry groups, except Transportation Equipment, employ fewer than 50 workers each.

The table on page 6 shows the distribution of the returns from CMA and CFIB members by industry, major group, and firm size.

The reader is cautioned against generalizing the survey results beyond the sample itself. The results should be considered an accurate assessment only of the information reported by the firms responding to the survey.

³This calculation is based on the 1978 annual average reported in the Labour Force Survey.

TABLE 1
DISTRIBUTION OF RESPONDENTS BY ASSOCIATION, MAJOR GROUP, AND FIRM SIZE

Major Group	Firm Size													
	Total		0-19		20-49		50-99		100-499		500+		No Response	
	CMA	CFIB	CMA	CFIB	CMA	CFIB	CMA	CFIB	CMA	CFIB	CMA	CFIB	CMA	CFIB
Primary Industries	6	4	0	1	1	1	1	2	1	0	2	0	1	0
Food, Beverages, Tobacco	27	27	3	12	3	9	2	4	15	1	4	1	0	0
Rubber and Leather	15	4	1	2	3	0	3	0	7	2	1	0	0	0
Textiles and Clothing	31	16	3	4	4	8	4	4	13	0	6	0	1	0
Wood Industries	37	36	11	15	12	11	5	5	8	5	1	0	0	0
Paper and Allied	20	7	3	3	1	3	3	1	12	0	1	0	0	0
Printing and Publishing	19	39	4	26	5	11	2	2	7	0	1	0	0	0
Primary Metal	38	9	2	3	11	2	2	2	18	2	5	0	0	0
Metal Fabricating	123	102	20	47	34	42	26	10	39	3	4	0	0	0
Machinery	89	18	12	8	22	3	19	6	25	1	11	0	0	0
Transportation Equipment	37	16	2	4	4	7	5	4	15	1	11	0	0	0
Electrical Products	80	15	9	9	16	2	8	0	30	4	17	0	0	0
Non-Metallic Mineral Products	23	12	2	5	7	4	1	2	12	1	1	0	0	0
Petroleum and Coal Products	12	1	1	1	1	0	1	0	5	0	4	0	0	0
Chemical Products	73	10	14	5	15	4	14	1	21	0	9	0	0	0
Miscellaneous Industries	63	42	17	23	15	8	9	5	18	6	3	0	1	0
Construction	5	8	1	3	2	5	1	0	1	0	0	0	0	0
All Other	22	23	10	15	0	6	4	0	7	2	1	0	0	0
TOTAL	720 ^a	389 ^b	115	186	156	126	110	48	254	28	82	1	3	0

^aexcludes 27 respondents who asked that their returns remain confidential at the industry level.

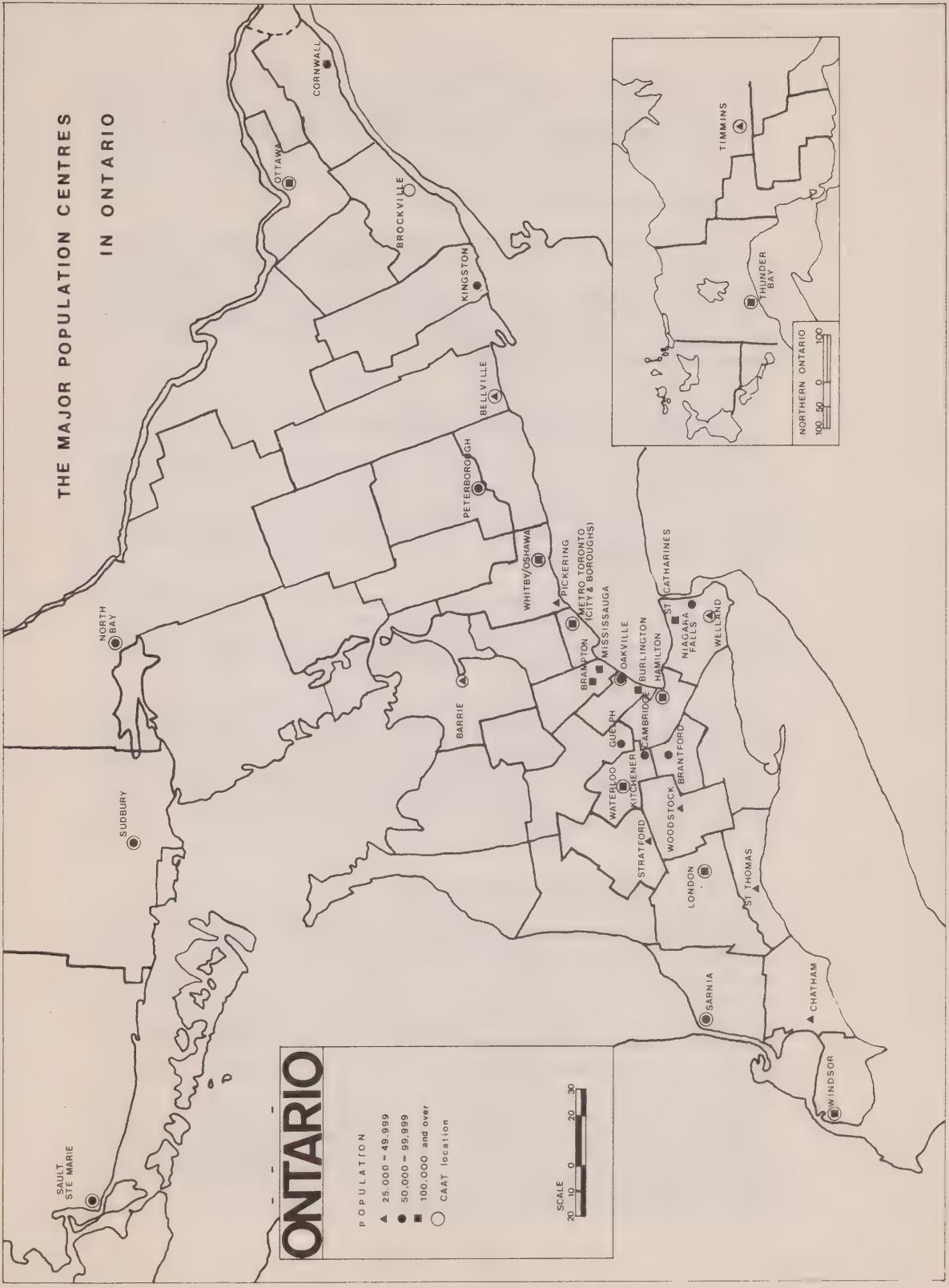
^bexcludes 17 respondents who asked that their returns remain confidential at the industry level.

THE MAJOR POPULATION CENTRES
IN ONTARIO

ONTARIO

POPULATION
▲ 25,000 - 49,999
● 50,000 - 99,999
■ 100,000 and over
○ CAAT location

SCALE
20 10 0 20 30



CHAPTER II

SKILL REQUIREMENTS AND RECRUITMENT PLANS IN ONTARIO

1. Major Manufacturing Industries¹

Employment in Ontario's manufacturing industries is concentrated in four industry groups: Transportation Equipment, Food and Beverages, Metal Fabricating, and Electrical Products. Comprising over 43 percent of total employment in manufacturing, these four industries are the backbone of Ontario's manufacturing sector.

Transportation Equipment Industries

Although only 3.2 percent of Ontario's manufacturing establishments are engaged in the production of transportation equipment, these industries employ almost 12 percent of the work-force in manufacturing, and are thus the largest employer in the manufacturing sector.

More than 74 percent of the provincial employment in these industries is concentrated in ten major urban centres: Brampton, Chatham, London, Mississauga, Oakville, Oshawa, St. Catharines, St. Thomas, Stratford, and Windsor.

Motor Vehicle Manufactures and Motor Vehicle Parts and Accessories account for more than 78 percent of the employment in Transportation Equipment and more than 65 percent of the establishments. Three large automotive centres - Oakville, Oshawa, and Windsor - together employ more than 45 percent of the work-force in this industry in Ontario.

Food and Beverages Industries

This is the second-largest manufacturing industry group in Ontario, employing well over 10 percent of the workers in manufacturing. Although Metropolitan Toronto has the heaviest concentration of employment in these industries, Hamilton, London, Ottawa, St. Catharines, and Windsor are also important centres. These six centres employ a total of 68 percent of the Food and Beverage workers in these industries in Ontario,

¹The discussion in this section is based on data from the 1975 Census of Manufactures, Scott's Industrial Directory of Ontario Manufactures (11th Edition, 1978), and MIT's 1978 Profile of Ontario Municipalities.

Toronto alone accounting for 40 percent. Slaughtering and Meat Processors, Bakeries, Beverage Industries, and Miscellaneous Food Industries account for over 64 percent of the provincial employment in this industry group. Within Metropolitan Toronto these four industry classes account for 75 percent of the local employment in this industry.

Metal Fabricating Industries

This industry group is the third-largest employer in manufacturing in Ontario. It employs just over ten percent of the workers in Ontario's manufacturing industries and accounts for almost 17 percent of the manufacturing establishments in the province. Cambridge, Kitchener, Mississauga, St. Catharines, Toronto, and Windsor together employ over 58 percent of the province's work-force in these industries. Toronto alone accounts for more than 32 percent of total employment.

More than 52 percent of the total employment in Metal Fabricating is concentrated in the Metal Stamping and Processing, Hardware, Tool and Cutlery, and Miscellaneous Metal Fabricating Industries.

Electrical Products Industries

This industry group is the fourth-largest employer in manufacturing and accounts for 9.8 percent of total provincial employment in manufacturing. Nearly two-thirds of the workers in this industry group are employed in nine major centres: Brockville, Cambridge, Guelph, Hamilton, Kitchener, London, Mississauga, Peterborough, and Toronto. Toronto alone accounts for almost 30 percent of provincial employment in these industries.

Communication Equipment Manufacturers and Manufacturers of Electrical Industrial Equipment are the two most important classes in this industry group, together employing more than 56 percent of its workers.

Other Significant Manufacturing Industries

Other significant manufacturing industries in Ontario include the Primary Metal Industries, which employ 8.3 percent of the provincial work-force in manufacturing; the Machinery Industries (6.6 percent); the Printing, Publishing and Allied Industries (5.6 percent); the Paper and Allied Industries (5.3 percent); the Chemical and Chemical Products Industries (5.2 percent); Miscellaneous Manufacturing (4.7 percent); the

Rubber and Plastics Products Industries (4.0 percent); the Textiles Industries (3.6 percent); and the Non-Metallic Mineral Products Industries (3.2 percent).

Employment in Primary Metals, 58 percent of which is in Iron and Steel Mills, is located mainly in Hamilton. Other important centres are St. Catharines (9.4 percent), and Welland (6.4 percent).

Twenty-three percent of provincial employment in the Machinery Industries is located in Metropolitan Toronto, and the centres of Brantford, Hamilton, Kitchener, Mississauga, and London combined employ another 29 percent of the work-force in this industry.

Almost half the employment in Printing (48 percent) is in the Commercial Printing Industries; 55 percent of the employment in Printing is concentrated in Metropolitan Toronto.

Forty-six percent of the employment in the Paper and Allied Industries is in Pulp and Paper Mills; and 31.1 percent of the employment in the Paper and Allied Industries is located in Toronto.

Toronto and Sarnia are the two main centres for the Chemical and Chemical Products Industries: 33.4 percent of employment in these industries is in Toronto and 13.6 percent in Sarnia. Thirty percent of the employment in these industries is concentrated in Industrial Chemical Manufacturers.

Well over half (58.3 percent) of the employment in the Miscellaneous Manufacturing Industries is located in Metropolitan Toronto, and 36.5 percent of the employment in these industries is in Scientific and Professional Equipment.

More than half (52.3 percent) of the employment in the Rubber and Plastics Products Industries is in the Rubber Products Industries. The two main centres of activity in this industry group are Toronto, which accounts for 28.1 percent of provincial employment in Rubber and Plastics, and Kitchener, which accounts for 15.7 percent.

Two industry classes are of particular importance in the Textiles Industries: Man-Made Fibre, Yarn and Cloth, which comprises 30.5 percent of provincial employment in Textiles, and Auto Fabric Accessories, which comprises 15.7 percent of provincial employment in Textiles. Toronto, Kingston, and Kitchener, which account for 18.9 percent, 8.4 percent, and 9.6 percent, respectively, of total provincial employment in Textiles, are the three main centres of activity in the Textiles Industries.

Glass and Glass Products Manufactures are of special importance in the Non-Metallic Mineral Products Industries, 28 percent of whose employment is in this industry class. Toronto and Hamilton, which account for 17.8 percent and 10.0 percent, respectively, of employment in Non-Metallic Minerals, are the two main centres for these industries.

Each of the remaining seven industry groups accounts for only a small proportion of Ontario's employment in manufacturing. The Furniture and Fixtures Industries, 57 percent of which is concentrated in Household Furniture Manufactures, account for only 2.8 percent of employment in manufacturing. The Clothing Industries account for 2.6 percent of employment in manufacturing, 50.9 percent of which is in Men's Clothing Factories; these industries are located mainly in the Toronto area. The Wood Industries have 2.3 percent of provincial employment in manufacturing. The Leather Industries, 30 percent of whose employees are in Toronto, account for 1.5 percent of total employment in manufacturing; 63.7 percent of the employees in these industries work in Shoe Factories. The Petroleum and Coal Industries are located primarily in Sarnia and Oakville; these industries account for 1.1 percent of provincial employment in manufacturing, and 92.7 percent of their employees work in Petroleum Refining Activities. Knitting Mills employ 0.9 percent of provincial manufacturing workers; 73.6 percent of the employees in these industries are in Knitting Mills Except Hosiery Mills, and the main locations of these industries are Cambridge and Kitchener. The Tobacco Products Industries, the smallest industry group in the province with only 0.04 percent of provincial employment in manufacturing, is located mainly in southwestern Ontario.

2. Survey Results

Of the 5,770 questionnaires that were sent to manufacturers in Ontario 1,153 responses were received. Five hundred and seventy-six firms reported that they are currently experiencing shortages of skilled tradesmen and 577 firms reported that their manpower needs are being met. Of the 576 firms currently experiencing shortages, only 22 percent are small firms employing less than 20 workers. Of the respondents currently experiencing recruitment difficulty the survey results show that the incidence of recruitment difficulty is directly related to the size of the firms. That is, a higher proportion of responding firms with 100 or more employees is currently experiencing difficulty relative to smaller firms. While 41 percent of responding firms with fewer than 20 employees are currently experiencing shortages, 50 percent of firms with between 20 and 99 employees and 56 percent of firms

with more than 100 employees are experiencing such shortages.

Some industries are overrepresented in relation to their actual proportion at the provincial level. Although Primary Metal, Metal Fabricating, Machinery, Transportation Equipment, and Electrical Products Industries collectively comprise 47.4 percent of survey respondents, they account for only 30.6 percent of all establishments in the province.

Other industries are underrepresented. Among the most significant are the Food and Beverage, and Printing and Publishing groups. Although the former comprises 12.8 percent of all establishments in the province, it accounts for only 4.8 percent of all survey respondents. This discrepancy is even more pronounced for the Printing and Publishing industry group. Although that industry comprises 13.0 percent of all establishments in the province, it contains only 5.3 percent of all survey respondents.

Generally, large firms indicate that they are experiencing shortages more often than smaller firms do.

2.a. Current Shortages

Survey results show that shortages are currently being experienced in approximately 250 occupations in Ontario. These shortages span all manufacturing industries. The 576 respondents to the survey who are currently experiencing shortages identified almost 2,900 positions that currently require filling. These respondents at the present time employ 12,947 workers in these occupations, of which 643 (5 percent) are expected to retire during the next five years.

Though the number of job openings varies considerably from one occupation to another, almost 68 percent of the openings are in the following 11 broad occupations: Machine Operator (401), Tool/Die/Mould/Cabinet Maker (250), Machinist: General (333), Labourer (189), Engineer (187), Welder (138), Assembler (89), Welder: Fitter (83), Assembler: Fitter (81), Electrician (79), and General and Systems Analyst (70).

Table 2 (pages 19 to 24) lists all the broad occupations in which survey respondents report current shortages, as well as those specializations within these broad occupations in which ten or more workers are required. This table shows the total number of workers now employed in these occupations, the number expected to retire during the next five years, and the number of job openings that employers are trying to fill.

The occupation in which the largest shortages are being

experienced is Machine Operator. More than 24 percent of the 401 openings for Machine Operators are for Lathe Operators (53) and Press/Brake/Punch Operators (45). The firms responding to the survey now employ 153 Lathe Operators, 16 of whom are expected to retire during the next five years, and 160 Press/Brake/Punch Operators, six of whom are expected to retire within the next five years. A majority of the positions for Lathe Operators are concentrated in the Machinery Industries, where most of these positions are required by medium-sized firms (i.e., those employing between 50 and 99 workers). Most of the positions for Press/Brake/Punch Operators are in the Metal Fabricating Industries, where a majority of these positions are again in the medium-sized firms.

Most of the 333 openings for Machinist: General are concentrated in either Transportation Equipment or Metal Fabricating. Survey respondents currently employ 1,368 Machinists, 113 of whom are expected to retire during the next five years. More than 98 percent of the positions in Transportation Equipment are in large firms (i.e., those employing 100 or more workers), and 61 percent of those in Metal Fabricating are required in medium-sized firms.

More than 45 percent of the 250 positions for Tool/Die/Mould/Cabinet Makers are for Tool-and-Die Makers. The firms responding to the survey currently employ 447 Tool-and-Die Makers, 39 of whom are expected to retire during the next five years. Almost half of all Tool-and-Die Makers are required by the Machinery Industries, and 64 percent of the positions in these industries are in medium-sized firms.

More than 58 percent of the 189 positions for Labourers are for Semi-Skilled Labourers. Survey respondents currently employ 414 Semi-Skilled Labourers, 15 of whom are expected to retire during the next five years. Most of these positions are concentrated in medium-sized firms in the Electrical Products and Wood Industries.

Openings for Electrical and Industrial Engineers make up 46 percent of the 187 openings for engineers in the province. Respondents currently employ 228 electrical engineers, three of whom are expected to retire during the next five years, and 34 Industrial Engineers, none of whom are expected to retire during that time. Most Electrical Engineers are required by large firms in the Machinery Industries, and most Industrial Engineers are required by large firms in the Chemical Products Industries.

Openings for Electrician: Wirer make up almost 56 percent of the 79 openings for Electricians. Survey respondents

employ 195 workers in this occupation, 16 of whom are expected to retire during the next five years. Three quarters of these Electricians are required by firms in the Electrical Products Industries, most of which are large firms.

Eighty-five percent of the 138 openings for Welders are for Welder: Industrial. Respondents currently employ 647 Industrial Welders, 29 of whom are expected to retire during the next five years. These positions are concentrated in large firms in the Machinery Industries, and medium-sized firms in the Metal Fabricating Industries.

Most of the 83 Welder: Fitters are required by medium-sized firms in Metal Fabricating and large firms in the Machinery Industries. Survey respondents currently employ 189 Welder: Fitters, six of whom are expected to retire during the next five years.

Positions for Assemblers are distributed fairly evenly among Assembler: General Production, Assembler: Electronic, and Assembler: Mechanical. Survey respondents currently employ 139 General Production Assemblers, three of whom are expected to retire within five years; 74 Electronic Assemblers, none of whom are expected to retire; and 68 Mechanical Assemblers, one of whom is expected to retire. Most General Production Assemblers are required in large firms in the Electrical Products Industries and medium-sized firms in the Wood Industries, most Electronic Assemblers are required by small firms in the Electrical Products Industries, and most Mechanical Assemblers are required by large firms in the Machinery Industries.

More than 48 percent of the 81 openings for Assembler: Fitter are for Assembler-Fitter: Machine Tool. Respondents currently employ 129 workers in these positions, five of whom are expected to retire during the next five years. These workers are required mainly by large firms in both the Metal Fabricating and Machinery Industries.

More than 91 percent of all positions for Analysts are for Analyst: Systems. Respondents currently employ 167 Systems Analysts, none of whom are expected to retire during the next five years. Most Systems Analysts are required by large firms in the Machinery Industries.

2.b. Expansion Plans and Recruitment Outlook

A total of 617 respondents are planning to expand their firms during the next twelve months, including 392 who are currently experiencing recruiting difficulties. In other words, 68 percent of the respondents with current shortages

plan to expand their firms in the future, while only 39 percent of those not currently experiencing shortages plan to expand.

Most respondents who plan to expand their firms in the future foresee recruiting difficulties regardless of whether or not they are experiencing any difficulty at present. The expectation of difficulty in hiring for future needs is most apparent among firms in Printing and Publishing, Metal Fabricating, Machinery, and Construction. Generally, of those firms with current recruiting difficulties the smaller the firm is the more likely it is to fear difficulty in hiring. Among firms with no current recruiting difficulties medium-sized firms are most likely to expect hiring difficulties in the future.

The most frequently-mentioned occupations in which recruiting is expected to be "somewhat difficult" or "very difficult" are: Machinist: General; Assembler: Electronic; Welder: Industrial; Manager: Administrator; Foreman: Production Supervisor; Assembler: Lead Hand; Assembler: General Production; Maker: Cabinet; Maker: Mould; Maker: Tool-and-Die; Millwright; Operator: Lathe; Operator: Press/Brake/Punch; Welder: Fitter; Electrician: General; Electrician: Wirer; Engineer: Electrical; Engineer: Electronic; and Engineer: Research and Development.

Though the reasons cited for recruiting to be "somewhat difficult" vary considerably from one occupation to another across the province, a lack of specialized skills and a lack of on-the-job experience, whether separately or in combination, are cited more frequently than any other reason. Many employers fear that no one will apply for many of these new positions, and some also mention a lack of academic training, though this concern is minor in relation to the others cited above.

A lack of specialized skills is mentioned more often than any other reason for difficulty hiring General Machinists, Electronic Assemblers, and Industrial Welders, and a lack of on-the-job experience is mentioned more often than any other for expected shortages of Managers, Production Foremen, Assembler: Lead Hands, and General Production Assemblers.

The combination of a lack of specialized skills and a lack of on-the-job training is cited more frequently than any other reason for difficulties hiring Cabinet Makers, Mould Makers, Tool-and-Die Makers, Millwrights, Lathe Operators, Press/Brake/Punch Operators, Welder: Fitters, General Electricians, Electrician-Wirers, and Electrical, Electronic, and Research and Development Engineers.

In several cases a number of employers believe that there will be no applicants at all for a given job. At least one out of every five employers who expects he will need to hire additional Machinists, Tool-and-Die Makers, Lathe Operators, and Press/Brake/Punch Operators expects that these jobs will be difficult to fill simply because no one will apply for them.

There are a few jobs for which no hiring difficulties are expected in the future: Analyst: General, Apprentice: Diesel Engine, Apprentice: Welder, Baker: Helper, Bricklayer, Clerk: Typist, Seamstress, Technician: Quality Control, Technologist: Chemical, Operator: Calander, Operator: Compressor, Operator: Filler, Operator: Flaker, Operator: Reeling, and Operator: Trim.

2.c. Employer Concerns and Special Problems

Out of the many hundreds of specific comments made by employers across the province there emerges a virtual consensus on two main issues: a general lack of proper training in the industrial trades and a decline of the "work ethic" among young people. Many employers think that the education system has failed to produce the industrial skills and problem-solving ability that they need; too much emphasis is being given to university training, and only the less-intelligent and ambitious students are being encouraged to enter trades courses. It is time, in their view, to inform students of the rewards to be found in the skilled trades and to raise the status of blue-collar work in the minds of the Canadian public.

Opinions differ on the kind of training that is needed. Some employers decry the lack of highly specialized skills; others, often in smaller businesses, think workers need a more general background so they will be able to adapt to varied job demands. Most believe that too much weight is placed on classroom training to the detriment of the practical experience that prepares an employee to work without extensive supervision. Many respondents suggest that schools and businesses should collaborate to produce well-rounded apprenticeship training courses featuring balanced proportions of academic and on-the-job training. Many, though by no means all, believe the government should become more active in solving this problem; some recommend that the Government should create and subsidize a provincial or national apprenticeship system modelled after that in Britain and Europe. A very small minority of respondents believe, however, that the government has already interfered too much and should let the labour market take its course.

Many employers sponsor apprenticeship or other training programmes in their firms. Some are happy to train their own workers either because the skills they need are not highly specialized or because in-house training allows them to tailor the skills their employees learn to the demands they intend to make on them. But a great many employers undertake such training out of necessity and often with great misgiving, because it requires them to invest several years and a great deal of money in training a qualified journeyman who cannot be compelled to remain at his job. Experienced tradesmen are so scarce and competition for their services so fierce that many smaller businessmen have begun to complain of the predatory recruiting of some larger firms, which lure trained workers away from them with higher salaries and benefits than most smaller firms can afford. Firms in rural areas, where wages tend to be lower and the local supply of labour is smaller, are at a tremendous disadvantage. The burden of training for much-needed trades is not being borne equally, and many employers, though willing to cooperate in apprenticeship training, are afraid to incur the expense of time and money that it requires without some guarantee that the workers so trained will remain loyal to them. Some employers also believe that competition for trademen has driven pay rates far too high, and that overpriced labour has limited their ability to compete in international markets. Several employers recommend either industry-wide monetary levies for training or legislative requirements that firms train apprentices in proportion to the size of their labour force.

Just as worrisome to our respondents as the general lack of industrial training is the widespread belief that young people are no longer willing to produce an honest day's work for an honest day's pay. Businessmen in every part of the province complain that their employees lack discipline and ambition, that they are irresponsible and are corrupted by "do-your-own-thing" attitudes, and that they expect to receive high wages in return for few skills and little real work. Many young people are thought to be too easily satisfied with the relatively high wages paid for unskilled labour in large union shops and to be uninterested in undergoing the lengthy apprenticeship at low pay that will lead to a more satisfying career in the skilled trades.

Easy access to UIC benefits and the development of a welfare state make many employers angry. They believe that benefits are generous enough to give people the option of refusing to take jobs that are available at reasonable wages. Several employers suggest that UIC benefits be lowered to make the prospect of working more attractive, and more than one respondent suggests that the receipt of UIC benefits should be made conditional on accepting job training.

The Canada Employment Centres receive the harshest criticism. A few respondents appear satisfied with the results they have obtained through the CECs, but the majority who mention them express their disapproval bluntly: they believe that the CECs are insensitive to their needs and are doing a poor job of screening applicants. Employers report that they waste valuable time interviewing CEC prospects whose meager skills bear no relation to the jobs for which they are hiring.

Dissatisfaction with restrictive immigration regulations is expressed by a number of employers, many of whom regret the loss of immigration as a source of tradesmen. In their view it is self-defeating to stem the influx of skilled immigrants on the pretext that a Canadian can be trained for a given job; in fact, Canadians often are not being trained or cannot be trained soon enough to meet an employer's needs, and those who are trained here cannot always match the high standard of skills possessed by many foreigners.

Though many types of tradesmen are reported to be scarce there are a few that appear repeatedly in the respondents' comments: mechanics, machinists, welders, electricians, millwrights, tool-and-die makers, sewing machine operators, and woodworkers are among the most desperately scarce, though this is by no means an exhaustive list. Accountants, technically trained salesmen, and other professionals are cited with surprising frequency as difficult to find, mainly in the smaller centres. Many employers state plainly that although they are not planning to expand their firms during the next twelve months they live in constant fear of unexpectedly losing key tradesmen, one or two of whom can often make an enormous difference in the productivity of an entire plant. Some employers mention that they have suffered business losses because needed skills were unavailable, or have reduced their production simply to accommodate a shortage of skills; others have introduced automation or discontinued certain product lines because they could not afford to rely on the increasingly uncertain supply of Canadian skilled labour.

Table 2
Current Shortages Reported by Respondents in Selected Occupations

Occupation	Number Currently Employed	Number Expected to Retire	Number of Positions to Fill	CURRENT SHORTAGES
				Number of Positions in the Main Industries Affected by the Shortages ^(a)
Accountant	6	2	10	Print(2),M(1),L(1); Chem(4),L(4)
Analysts	174	0	70	
Analysts, Systems	167	0	64	Mach(41),S(1),L(40); Other(17),L(17)
Apprentice	18	0	14	MetFab(4),S(2),M(2); Mach(3),S(3); Other(4),S(4)
Artist	21	1	4	Print(3),S(2),M(1)
Assembler	335	4	89	
Gen. Prod.	179	3	35	Wood(9),S(1),M(4),L(4); Elec(13),M(1),L(12)
Assembler, Electric/onic	74	0	23	Elec(9),S(4),M(3),L(2); Other(12),L(12)
Assembler, Mechanical	68	1	24	Mach(22),M(2),L(20)
Assembler, Lead Hand	86	6	24	MetFab(10),M(4),L(6); Spec(6),L(6)
Assembler, Fitter	233	13	81	
Assembler, Fitter, Gen. Prod.	70	4	19	MetFab(12),S(2),M(3),L(7); Mach(7),S(2),M(5)
Assembler, Fitter, Equip	25	4	19	MetFab(18),S(4),M(11),L(3)
Assembler, Fitter, Mach/Tool	129	5	39	MetFab(13),L(13); Mach(24),M(8),L(16)
Baker	5	0	2	Food(2),S(2)
Builder	33	1	11	Trans(8),M(8); Spec(3),S(3)
Butcher	1	1	1	Wood(1),L(1)
Buyer	20	0	8	Mach(4),M(1),L(3); Petro(3),L(3)
Clerk	54	1	37	
Clerk, Gen. Office	20	1	10	Food(2),L(2); MetFab(3),M(3); Petro(2),L(2)
Clerk, Sales or Shipping	18	0	16	MetFab(3),M(2),L(1); Elec(6),S(1),L(5)
Carpenter	2	0	0	
Chemical Worker	36	3	13	Text(2),L(2); Chem(9),S(4),M(5)
Chemist	0	0	1	Spec(1),L(1)
Cutter	7	1	5	Rub(2),M(2); Wood(3),S(1),M(2)
Computer Personnel	55	0	23	Food(4),L(4); Trans(3),L(3); Elec(3),S(1),L(2); Other(3),L(3)
Designer	19	0	7	MetFab(2),M(2); Mach(2),M(2)

Table 2 (Cont'd)
Current Shortages Reported by Respondents in Selected Occupations

Occupation	Number Currently Employed	Number Expected to Retire	CURRENT SHORTAGES	
			Number of Positions to Fill	Number of Positions in the Main Industries Affected by the Shortages(a)
Draftsperson	47	2	19	
Draftsperson, General	39	2	13	MetFab(3),M(3); Mach(8),M(4),L(4)
Drafter, Designer	14	0	9	MetFab(3),M(3); Mach(2),L(2)
Driver	44	7	14	
Driver, Heavy Equip.	44	5	13	Wood(3),S(1),M(2); NonMet(4),M(4); Spec(3),M(3)
Electrician	794	36	79	
Electrician, General	512	15	22	PrimMet(9),L(9); Trans(6),L(6)
Electrician, Wirer	195	16	44	PrimMet(7),L(7); Elec(33),S(2),M(15),L(16)
Electrician, Helper	0	0	1	Rub(1),L(1)
Engineer	575	13	187	
Engineer, General	42	0	11	Mach(2),M(2); Other(8),L(8)
Engineer, Chemical	95	4	14	Chem(13),L(13)
Engineer, Electrical	228	3	60	Mach(50),L(50); Elec(6),M(4),L(2)
Engineer, Electronic	84	1	26	Elec(24),S(1),L(23)
Engineer, Industrial	34	0	31	Elec(8),L(8); Chem(13),L(13)
Engineer, Mechanical	22	1	15	Mach(3),L(3); Trans(6),M(2),L(4)
Estimator	12	2	9	MetFab(4),M(3),L(1); Mach(3),S(1),L(2)
Fabricator	56	2	17	MetFab(3),S(1),M(2); Mach(8),M(8); Spec(3),M(3)
Fabricator, General	43	0	11	MetFab(2),S(1),M(1); Mach(8),M(8)
Finisher	98	9	39	
Finisher, General	53	7	19	Wood(5),M(3),L(2); MetFab(10),S(3),L(7)
Finisher, Metal/Anodizer	39	1	17	MetFab(11),S(2),M(9); Spec(6),L(6)
Foreman/Prod. Supervisor	94	4	40	Text(4),M(3),L(1); MetFab(10),S(2),M(6),L(2); Trans(4),M(2),L(2); Elec(7),L(7)
Foreman Asst.	1	0	1	MetFab(1),L(1)
Grinder	115	1	19	
Grinder, General	8	1	7	MetFab(2),M(2); Elec(5),M(5)
Glass Blower	1	0	2	MetFab(2),S(2)
Installer	8	0	5	Wood(2),M(2); MetFab(1),M(1); Mach(2),S(2)
Iron Worker	81	5	8	PrimMet(8),L(8)

Table 2 (Cont'd)
Current Shortages Reported by Respondents in Selected Occupations

Occupation	Number Currently Employed	Number Expected to Retire	Number of Positions to Fill	CURRENT SHORTAGES
				Number of Positions in the Main Industries Affected by the Shortages ^(a)
Inventory, Material Controller	21	2	12	PrimMet(3),M(3); Mach(4),M(1),L(3)
Jeweler	2	0	1	Spec(1),S(1)
Labourer	1,669	63	189	
Labourer, Unskilled	1,113	33	49	Prim(12),L(12),Rub(15),L(15)
Labourer, Semi-Skilled	414	15	110	Wood(17),M(11),L(6); Elec(20),M(14),L(6); Chem(13),S(3),L(10); Spec(12),S(3),M(9)
Labourer, Skilled	142	15	30	MetFab(10),M(5),L(5); Elec(8),M(6),L(2)
Lithostripper	3	0	1	Print(1),S(1)
Layout	95	6	27	
Layout, General	40	2	14	MetFab(14),S(2),M(9),L(3)
Layout, Fitter	18	1	7	MetFab(7),S(1),M(6)
Machinist, General	1,368	113	333	MetFab(118),S(16),M(72),L(30); Mach(105),S(4),M(45),L(56); Trans(204),S(1),M(2),L(201); Elec(24),M(9),L(15)
Machine Tool Setter	10	0	4	Mach(2),L(2); Trans(2),M(2)
Maintenance	149	18	43	Trans(4),L(4)
Maintenance, General	46	6	15	Trans(4),L(4)
Maintenance, Mach/Mach Tool	67	4	16	PrimMet(3),L(3); MetFab(3),M(2),L(1); Mach(3),M(2),L(1); Elec(4),M(2),L(2)
Maker	809	60	250	
Maker, Cabinet	155	9	60	Wood(51),S(9),M(18),L(24)
Maker, Mould	61	2	32	PrimMet(8),S(1),M(5),L(2); MetFab(13),S(1),M(12); Mach(6),M(4),L(2)
Maker, Tool	99	5	29	MetFab(19),S(1),M(17),L(1); Elec(3),L(3)
Maker, Tool & Die	447	39	113	MetFab(56),S(12),M(36),L(8); Trans(16),M(2),L(14); Elec(11),L(11)
Manager/Administrator	31	4	24	Food(4),S(1),M(1),L(2); Elec(9),S(1),M(3),L(5)
Mechanic	404	28	89	
Mechanic, Heavy Equip.	56	2	11	Wood(4),L(4); Mach(3),L(3)
Mechanic, Machine/Engine	33	6	14	Text(3),L(3); Other(7),M(2),L(5)
Mechanic, Maintenance	198	19	37	Food(4),L(4); PrimMet(4),M(2),L(2); Trans(5),M(2),L(3); Elec(7),M(3),L(4); Chem(5),M(1),L(4)
Mechanic				
Class "A"	12	1	3	Food(2),L(2); Wood(1),L(1)

Table 2 (Cont'd)

Current Shortages Reported by Respondents in Selected Occupations

Occupation	Number Currently Employed	Number Expected to Retire	CURRENT SHORTAGES	
			Number of Positions to Fill	Number of Positions in the Main Industries Affected by the Shortages ^(a)
Metalworker	5	0	2	Spec(2),L(2)
Millwright	676	26	69	
Millwright, Industrial	345	26	63	PrimMet(24),L(24); MetFab(4),M(2),L(2); Mach(4),M(4)
Miner	0	0	1	Prim(1),L(1)
Operator, Machine	1,923	119	401	
Operator, Bolt Mach.	25	6	10	Trans(10),L(10)
Operator, Boring Mill	99	10	22	MetFab(10),M(8),L(2); Mach(10),S(1),M(6), L(3)
Operator, Drill	44	5	17	MetFab(4),M(4); Mach(7),L(7); Elec(4), S(1),M(2),L(1)
Operator, Dye House	48	0	15	Text(15),L(15)
Operator, Equipment	44	3	12	Prim(3),M(3); Wood(4),S(1),M(2),L(1)
Operator, Header	52	3	20	MetFab(10),M(10); Trans(10),L(10)
Operator, Knitting/Sewing	584	25	43	Rub(7),M(7); Text(30),M(17),L(13); Spec(6),M(6)
Operator, Lathe (All)	153	16	53	MetFab(11),S(2),M(7),L(2); Mach(28),S(2), M(14),L(12); Spec(10),L(10)
Operator, Milling Mach.	37	0	11	MetFab(9),M(8),L(1); Mach(2),L(2)
Operator, NC Machine	66	3	15	MetFab(9),M(3),L(6); Mach(3),L(3); Elec(3),L(3)
Operator, Office Machine	71	3	14	Print(7),L(7); MetFab(4),M(2),L(2)
Operator, Press/Brake/Punch	160	6	45	MetFab(21),S(2),M(17),L(2); Mach(7),M(4), L(3)
Operator, Screw Machine	45	5	15	MetFab(8),M(5),L(3); Trans(5),L(5)
Operator, Other	236	19	51	MetFab(22),S(2),M(7),L(13); Elec(14), S(12),L(2)
Pipefitter	239	13	11	Text(1),L(1); PrimMet(10),L(10)
Planner	0	0	3	MetFab(1),L(1); Mach(1),L(1); Elec(1),L(1)
Printer, Industrial	6	0	3	Print(1),S(1); Other(2),L(2)
Printer, Offset	16	3	6	Print(6),S(1),M(5)
Quality Control	132	3	40	
Quality Control, Inspector	132	3	40	Text(6),M(6); Elec(9),L(9)
Repair	483	6	31	
Repair, Equip.	382	0	11	Mach(4),L(4); Trans(5),L(5)
Rigger	59	4	4	PrimMet(4),L(4)
Salesman	253	2	46	
Salesman, General	171	1	20	Print(6),S(3),M(1),L(2); Elec(5),S(1),M(4)
Salesman, Customer Service	82	1	26	Mach(9),S(4),M(2),L(2)

Table 2(Cont'd)
Current Shortages Reported by Respondents in Selected Occupations

Occupation	Number Currently Employed	Number Expected to Retire	Number of Positions to Fill	CURRENT SHORTAGES
				Number of Positions in the Main Industries Affected by the Shortages(a)
Secretary	91	3	5	Spec(2),L(2)
Shoemaker	4	0	1	Spec(1),S(1)
Sign/Install/Paint/Make	20	2	11	Print(1),S(1); Spec(10),S(5),L(5)
Solderer	8	0	4	Elec(1),L(1); Spec(3),L(3)
Sprayer	40	2	9	
Sprayer, Paint	40	2	9	Wood(2),M(2); MetFab(2),M(2); Mach(2),L(2)
Stripper	7	0	2	Print(2),M(2)
Sinker, Die	5	2	3	MetFab(3),L(3)
Setter, Die	1	0	1	MetFab(1),M(1)
Spec/Prof.	2	0	2	Petro(1),L(1); Chem(1),L(1)
Technician	203	6	32	
Technician, Electronic	112	0	16	Mach(5),L(5); Elec(6),M(2),L(4)
Technician, Industrial	87	6	12	Text(2),L(2); Elec(8),M(2),L(6)
Technologist	17	0	10	Elec(2),S(1),L(1); NonMet(2),L(2); Chem(3),M(2),L(1)
Tinsmith	0	0	1	Elec(1),L(1)
Trouble Shooter, Mach	87	0	51	MetFab(1),M(1); Elec(50),L(50)
Tuner, Pipe Organ	3	0	2	Spec(2),S(2)
Typesetting	20	0	5	Print(5),S(3),M(2)
Tool & Die, General	1	0	1	MetFab(1), M(1)
Upholster	21	0	8	Wood(8),S(2),M(6)
Weaver	24	1	7	Text(7),L(7)
Welder	763	34	138	
Welder, Fluxcore	80	5	10	Mach(10),L(10)
Welder, Industrial	647	29	118	Wood(10),L(10); PrimMet(11),L(11); MetFab(21),S(6),M(13),L(2); Mach(42),S(3),M(4),L(35); Trans(15),S(2),M(9),L(4); Elec(11),M(4),L(7)
Welder, All Positions	23	2	5	Mach(2),L(2); Elec(2),L(2)
Welder, Class 1	4	0	2	PrimMet(2),S(2)

Table 2 (Cont'd)
Current Shortages Reported by Respondents in Selected Occupations

Occupation	Number Currently Employed	Number Expected to Retire	Number of Positions to Fill	CURRENT SHORTAGES	
				Number of Positions in the Main Industries Affected by the Shortages(a)	
Welder, Fitter	2	0	2	MetFab(30), S(9), M(20), L(1); Mach(28), S(6), M(8), L(14); Trans(15), L(15)	
Welder, Intermediate	4	0	1	Mach(1), S(1)	
Writer, Technical	0	0	1	Other(1), L(1)	
TOTAL	12,947	643	2,827		

(a) This column should be read as follows: Name of Industry (number of positions in the industry); size of industry, where "S" indicates small firms (less than 20 employees), where "M" indicates medium size firms (20 to 99 employees) and where "L" indicates large size firms (more than 100 employees); and number of positions in the industry size group. For example, the first line of the table should be read as follows: The Printing Industry Group has two accountant positions that require filling. One position is required by a medium size firm while the other is required by a large firm. The Chemical Industry group has four accountant positions that require filling. All four of these positions are required by large firms in the Chemical Industry group. It should be noted that information on all industry groups is not included in this table. The table refers only to those industry groups in which these shortage occupations are concentrated.

CHAPTER III

SKILL REQUIREMENTS AND RECRUITMENT PLANS BY MAJOR CENTRES

Eastern Ontario

Ottawa

1. Major Manufacturing Industries

The major employers in manufacturing here, according to the Census of Manufactures¹ are the Printing Industries, which employ over 38 percent of the local labour force in manufacturing. Next largest are the Food and Beverage Industries, which employ 18 percent of local labour force in manufacturing. Scott's Industrial Directory² reports that Electrical and Chemical Industries are also significant in this area.

2. Survey Results

A total of 21 firms responded to the survey from Ottawa, but two asked that their data not be included in the community tabulations. The remaining 19 firms employ a total of 1,540 workers. Only four of these firms employ over 100 workers each. The industry groups represented by the responding firms are Metal Fabricating, Printing and Publishing, Miscellaneous and Specialized Products, Food and Beverage, Textile and Clothing, and Electrical Products.

2.a. Current Shortages

Nine of the 19 respondents are currently experiencing recruitment difficulties. They are trying to fill a total of 42 positions in the following occupations: Engineer and Technologist (9), Machinist: General (7), Machine Operator, including Sewing Machine Operator (10), Electronic Assembler (10), Tool-and-Die Maker (2), Computer Personnel (1), Technical Writer (1), Lithographic Stripper (1), and Salesman (1). The firms indicating these shortages employ 112 people in these positions, and almost none are expected to retire during the next five years.

¹Hereafter cited as CM.

²Hereafter cited as Scott's.

2.b. Expansion Plans and Recruitment Outlook

Nine of the 19 respondents plan to expand their firms during the next twelve months and five are already having trouble hiring the tradesmen they need. All nine expect hiring difficulties for most of their future skill requirements. A number of jobs are expected to be "very difficult" to fill. Employers believe that there will be no applicants at all for Machine Operator, Layout Man, Technical Writer, and Colour Separation Technician. A lack of on-the-job experience is cited as the primary reason for difficulties in hiring Electronic Assemblers and Salesmen; a lack of specific skills is cited as a reason for difficulty hiring Designers, Mechanical Assemblers, and Tool-and-Die Makers; and a variety of reasons were given to explain why Electronic Engineers will be "very difficult" to find.

Positions considered "somewhat difficult" to fill are Skilled Machinists and Machine Operators, Industrial Welders and Painters, Office Clerks, and Salesmen for customer service, all because applicants lack on-the-job experience; Electrical Assemblers and Machinists to set up and operate milling machines, because applicants lack specialized skills; and Managers, Storekeepers, Scientists, and Research Technicians. Among jobs considered "easy" or "very easy" to fill are General Labour, Office Clerical staff, Shipper Receiver, various Assemblers other than Electrical or Electronic, and various administrative jobs.

In order to ensure that their manpower needs will be met employers are taking skill inventories of present staff to see whether specific requirements can be met internally with or without additional on-the-job training, providing apprenticeship and on-the-job training to new employees, and placing advertisements in newspapers. Six of the nine employers planning to expand their firms are already using these strategies, and a few others expect to use them in the future. Some of the most popular future actions are sending company representatives to recruit in community schools and training institutions (4 employers), recruiting outside Canada (3 employers), and placing job orders with private agencies (3 employers). In addition, five firms use the services of CECs to meet their manpower needs.

2.c. Employer Concerns and Special Problems

The main concern here is with the inadequacy of the educational system and the poor attitudes of the students it produces. The education system, in one respondent's view, is "not responding to changing national needs"; it does not pro-

vide adequate technical knowledge and is not turning out sufficiently skilled machinists, salesmen, etc. One employer suggests that the high schools should have more general courses in machinery and industrial drawing, and another suggests that more cooperative training between industry and the universities is needed. Yet another complained of irresponsible attitudes among students.

A variety of specific job needs were cited: electronic assemblers, engineers, designers, programmers, computerized photo typesetter operators, and garment engineers are difficult to obtain.

Finally, one graphics firm complained of competition with the federal government, which offers better pay and benefits and a "less demanding" pace of work.

Cornwall

1. Major Manufacturing Industries

Domtar's fine paper plant is the largest single employer in Cornwall according to Scott's and MIT's Profile of Ontario Municipalities³; its employment is estimated to be about 1,600 workers, or roughly 33 percent of local employment in manufacturing. The other major employers in manufacturing are the Textiles Industries and the Chemical Industries.

2. Survey Results

Four firms in the Clothing, Chemical Products, Electrical Products, and Food and Beverage Industries responded to the survey from Cornwall. These firms employ a total of 983 workers, and two of these firms employ between 100 and 150 workers each.

2.a. Current Shortages

None of the responding firms are experiencing shortages of skilled workers.

2.b. Expansion Plans and Recruitment Outlook

One of the respondents plans to expand his firm during the next twelve months, and expects sewing machine operators to be "somewhat difficult" to hire because applicants lack education, specialized training, and experience. In order to recruit the necessary workers he is contacting schools and other training institutions in the community, seeing an Ontario government representative about setting up training or seeking other manpower assistance, and placing job ads with the local CEC.

2.c. Employer Concerns and Special Problems

Among the few responses from this area, the problem of high turnover is especially prominent. Employees who complete their training in small firms often leave for jobs in higher-paying large firms, a problem one respondent thinks can be solved either by government subsidies or by government-sponsored training paid for by monetary levies on companies

³Hereafter cited as POM.

according to their size. The ease of obtaining UIC and WCB benefits is also cited as a factor that increases turnover.

A respondent in one large firm says that electricians, welders, and pipe-fitters are always in short supply. Another says that the skilled trades now command salaries that are unreasonably high.

Kingston

1. Major Manufacturing Industries

The Textiles Industries are the major manufacturers in Kingston, according to Scott's and POM; one firm, Dupont's nylon fibres plant, is reported to have over 1,700 employees accounting for more than 28 percent of local employment in manufacturing. The Food and Beverages Industries are also important in the Kingston area, having 6.8 percent of local employment in manufacturing.

2. Survey Results

Four firms employing a total of 809 workers responded to the survey from the Kingston area. One of the firms employs 750 workers and accounts for more than 92 percent of the total reported employment. The four respondents belong to the Electrical Products, Non-Metallic Mineral Products, Food and Beverage, and Tobacco Industries.

2.a. Current Shortages

Only one of the four firms is experiencing a shortage of skilled tradesmen. This firm is trying to fill only one position, that of diesel mechanic, in which no one is currently employed.

2.b. Expansion Plans and Recruitment Outlook

None of the four respondents from the Kingston area plan to hire additional workers during the next twelve months.

2.c. Employer Concerns and Special Problems

Accountants, electronic design engineers, and first-line managers are difficult for one wire and cable manufacturer to find; he complains that he has had "difficulty attracting the right type of professional to our location." Small firms here, as elsewhere, often find it necessary to train their own workers, since Canada Manpower and newspaper ads do not produce the skilled people they need. Gasoline and diesel mechanics are needed "desperately," according to one employer.

Belleville

1. Major Manufacturing Industries

The Electrical Products Industries, dominated locally by one firm--Northern Telecom Canada Ltd., Subscriber Switching Division, which employs about 900 workers, or 22.1 percent of local manufacturing employment--are the major manufacturers in this area, according to Scott's. Another important manufacturing group here is the Food and Beverage Industries, which account for about 10 percent of local workers in manufacturing. The Non-Metallic Mineral Industries and the Metal Fabricating Industries are also significant employers here.

2. Survey Results

The eight respondents from Belleville employ a total of 2,160 workers. Three of the firms have between 20 and 49 workers each, four have between 100 and 499 each, and one has over 500 employees. Two employers specialize in Castings and Steel Fabrication for Machinery and Equipment; others produce Ornamental Metals, Non-Metallic Mineral Products, Chemical Products, Electrical Equipment, Paper Products and Clothing Products.

2.a. Current Shortages

Five of the eight respondents are experiencing recruitment difficulties. These five firms are trying to fill at least 33 positions, 10 of which are for Engineers and 10 for Packers. The remaining 13 are for Welder (3), Grinder (2), Moulder (4), Machinist (2), Steel-Fabrication Layout (1), and Engineer: Stationary, Class II (1). These five firms now employ 118 workers in the shortage occupations and expect at least ten to retire over the next five years.

2.b. Expansion Plans and Recruitment Outlook

Three of the eight respondents who are planning to expand their firms during the next twelve months expect hiring to be "very difficult" for Engineers and Moulders. The reason cited for this difficulty is the lack of on-the-job experience among applicants for these positions. They also expect hiring for Grinders to be "somewhat difficult." No difficulty is forecast in hiring General Production Technicians, Assembler-Operators, and Testers.

Two of the three employers who expect difficulty in staffing for their future needs are placing advertisements in

newspapers and taking skill inventories of their current employees to determine whether their specific requirements can be met internally without additional on-the-job training. The third employer is searching his present staff to determine the feasibility of internal training and apprenticeship; he is planning in addition to consult Ontario Government representatives and to use the services of the CECs. For engineering skills he has indicated a different strategy: recruiting through schools and training institutions, placing job orders with private agencies, and initiating off-shore hiring.

2.c. Employer Concerns and Special Problems

Most of the comments from employers in Belleville concern difficulties in filling specific jobs. One employer reports that machinists and accountants are difficult to find, while another says that getting qualified millwrights is "always a problem." Another has had trouble getting qualified sewing-machine operators in the past, but "in-house training with government assistance solved the problem." A third seems to be satisfied with the results he gets by placing new employees in "entry-level" jobs and promoting them from within the firm.

Peterborough

1. Major Manufacturing Industries

The Canadian General Electric Company employs over 4,000 workers in Peterborough, or about 43 percent of the local labour force in manufacturing according to CM. The Machinery Industries and the Food and Beverage Industries are also important manufacturers in this area.

2. Survey Results

Nine firms employing a total of 5,720 workers responded to the survey from Peterborough. More than 80 percent of these workers are employed in the Primary Metal and Electrical Products Industries. Six of the nine responding firms employ more than 100 workers each.

2.a. Current Shortages

Five of the nine respondents are experiencing difficulty recruiting the tradesmen they need. They are trying to fill a total of at least 34 positions in the following occupations: Machine Operator (7), Electrician (6), and Technician (4) in the Electrical Products and Non-Metallic Mineral Products Industries; Tool-and-Die Maker (8), Machinist: General (6), and Operator: Tube Mill (2) in the Wood, Paper, Machinery, and Primary Metals Industries; and Sprayer (1) and an unspecified number of Welders. In two of the most important shortage occupations, Tool-and-Die Maker and Machine Operator, these firms now employ 102 workers, nine of whom are expected to retire during the next five years. In the remaining shortage occupations there are 372 workers, 27 of whom will retire during that period.

2.b. Expansion Plans and Recruitment Outlook

Eight of the nine respondents to the survey plan to expand during the next twelve months. Two respondents are not at present experiencing recruitment problems and do not expect any such problems in the future. The other six indicate that hiring will be difficult for Machine Operators, Tool and Die Machine Parts Makers, Machinists, Technicians, Welders, Electricians, and Mechanics. The main reason for the expected difficulties in hiring Machine Operators, Technicians, Welders, Electricians, and Mechanics is a lack of specialized skills on the part of applicants. Tool and Die Machine Parts Makers and Machinists are expected to be difficult to find either because no one will apply for these jobs or because

applicants will lack either the skills or the combination of skills and experience necessary for these jobs. One employer expects Forklift Operator and Labourer to be "easy" positions to fill.

Several employers are taking skill inventories of their present employees to assess whether their needs can be met internally either with or without further on-the-job training, and four respondents are placing advertisements in newspapers. Four respondents intend to both sponsor apprenticeship or other on-the-job training and seek assistance for training or other manpower assistance from the Ontario Government, and three intend to recruit tradesmen overseas.

2.c. Employer Concerns and Special Problems

Among the relatively few responses from Peterborough two noted the difficulty of getting tool-and-die makers; one said he simply "cannot hire" such workers because they are so scarce and the other complained that large companies keep their tool-and-die makers by paying higher wages. The lack of experienced engineers is a problem in another firm, which usually hires large numbers of university graduates and gives them one year of special training before placement. One other employer noted an unusual problem: a shortage of bilingual clerk-typists.

"The Golden Horseshoe"

Oshawa-Whitby

1. Major Manufacturing Industries

General Motors Canada is by an overwhelming margin the largest single employer in the Oshawa area, according to POM. It employs approximately 17,600 workers, over 80 percent of local employment in manufacturing. Significant local employment is also found in the Metal Fabricating Industries.

2. Survey Results

Ten firms employing a total of 31,254 workers responded to the survey from Oshawa-Whitby. One very large firm, however asked that its results be treated confidentially at the local community level, so that only nine firms represent this area. Only three of these firms employ 50 or more workers each. The industry groups they represent are Furniture, Metal Fabricating, Textiles, Leather, Wood, and Transportation Equipment.

2.a. Current Shortages

Two of the nine firms are experiencing difficulty hiring skilled workers. They are currently trying to fill a total of four positions for Steel Metal Workers (3) and Foreman (1). These two firms currently employ nine workers in these occupations, and they expect one to retire during the next five years.

2.b. Expansion Plans and Recruitment Outlook

Three of the nine respondents are planning to expand their employment during the next twelve months, and two of these now face recruiting difficulties. Three of the five new positions to be created are expected to be "very difficult" to fill (Cabinet Maker, Woodfinisher, and Salesman), because applicants lack specialized skills and on-the-job experience, while the remaining two positions (Truck Body Builder and Labourer) are expected to be "easy" to fill.

None of the respondents revealed a recruitment strategy.

2.c. Employer Concerns and Special Problems

The only respondent from this area says he does not need highly skilled personnel and can fill his requirements through newspaper ads and Canada Manpower.

Pickering

1. Major Manufacturing Industries

Pickering is a small centre that employs fewer than 800 workers in the manufacturing industries, according to CM. The Machinery, Metal Fabricating, and Wood Industries are the major manufacturers here.

2. Survey Results

Six firms employing a total of 467 workers responded to the survey from Pickering. Four firms, employing over 60 percent of these workers, belong to the Metal Fabricating Industries. The other two firms are in the Wood and Furniture and Paper and Allied Industries. Only two of the responding firms employ more than 100 workers each.

2.a. Current Shortages

Four of the six respondents are having difficulty hiring skilled tradesmen. They are trying to fill a total of 16 positions in the following occupations: Machine Operator (9), Layout Fitter (3), Heavy Equipment Operator/Driver (1), Welder (1), and semi-skilled worker (2). These four firms now employ 79 workers in these occupations, only one of whom is expected to retire during the next five years.

2.b. Expansion Plans and Recruitment Outlook

Five of the six employers are planning to expand their firms during the next twelve months. Three expect hiring to be "somewhat difficult" or "very difficult" for the following 13 jobs: Operator, especially for n.c. machines, Draftsman, Cutter, Layout Fitter, Mechanic, Assembler-Fitter, Welder, Research and Development Engineer, Producton Supervisor, Manager, Analyst, Salesperson, and Bilingual Clerk. A lack of on-the-job experience among applicants is cited as the reason most of these jobs will be difficult to fill; Mechanics will be difficult to find because there are no applicants; and the Cutter and Layout Fitter jobs as well as all the "white-collar" jobs will be difficult to fill because applicants are thought to lack both the requisite skills and on-the-job experience.

In-house training of current or new employees and the placing of advertisements with CECs or in newspapers are the two recruitment strategies cited most often by respondents from Pickering. Four employers are taking or will take an

inventory of skills among their current employees to determine if they can meet their firms' needs with further training, and four either have or will set up an apprenticeship training programme in their firms. Three employers each are using newspaper ads and ads with CECs or private agencies to seek the skilled labour they need. One is consulting an Ontario Government representative for training or other manpower assistance, one may recruit overseas in the future, and one is sending company representatives to the schools in his community.

2.c. Employer Concerns and Special Problems

A general lack of proper training and education among young workers is the main concern of those who responded from Pickering. One employer believes that the shortages of skilled labour will not be eliminated until an apprenticeship programme similar to those in Europe is instituted here. Another, who is having difficulty getting machinists and mechanics, has been sending employees to Durham College and reports that he is "very happy" to support this programme. But another respondent says that the community colleges are not graduating people with the requisite skills, and also notes that high Canadian wages make it difficult to compete in the export market with American goods.

Poor attitudes among the young and the development of the "welfare state," which makes it too easy to live without working, are also cited.

Brampton

1. Major Manufacturing Industries

The four major manufacturing industries in Brampton are the Transportation Equipment Industries, which employ 11 percent of the total employment in manufacturing in this area; the Metal Fabricating Industries, which employ 9 percent of the total; the Non-Metallic Minerals Industries, which employ 7 percent of the total; and the Food and Beverage Industries, which employ 5.3 percent of the total. Together these four industries account for about 33 percent of local employment in manufacturing. The Rubber and Plastics Industries and the Chemical Industries are also important manufacturers in the area, and significant employment is found in both Printing and Primary Metals.

2. Survey Results

Thirty firms employing a total of 6,170 workers responded to the survey from Brampton. Forty-four percent of the respondents employ more than 100 workers each and 33 percent between 50 and 99 employees each. Only 23 percent employ fewer than 50 workers each. The respondents represent a wide range of industries: five of the 30 respondents are in the Machinery Industries and three each are from Electrical Products, Chemical Products, Transportation Equipment, Metal Fabricating, and Primary Metals. The other industries represented are Printing and Publishing, Food, Beverage and Tobacco, Textiles and Clothing, Wood and Furniture, Paper and Allied, and Non-Metallic Mineral Products.

2.a. Current Shortages

Sixty-three percent of the responding employers report having difficulty filling a total of 188 positions in the following occupations: Industrial Welder (15), Machinist (13), Labourer: Semi-Skilled (10), Operator: Dyehouse Machine (15), Operator: Lathe (10), Quality Control: Inspector (9), Engineer: Electronic (8), Engineer: Industrial (8), Tool-and-Die Maker (6), Fabricator (6), Maintenance Mechanic (6), Instrument Mechanic (5), Finisher (6) Die Maker (3), Technician: Electronic (3), Maintenance: Machine (3), Assembler: Lead Hand (3), and one or two openings each for Production Assembler, Structural Assembler, Chemical Worker, Cutter, Computer Personnel, other Engineers, Sheet Metal Fabricator, Foreman, Inventory Control, Skilled Labourer, Die Maker, Mould Maker, Tool Maker, Heavy Equipment Mechanic, Millwright, Machine Operator, Operator: Cutter, Operator: Drill, Operator:

Grinder, Operator: Office Machine, Operator: Saw, Operator: Screw Machine, Die Repairer, Salesman: Customer Service, Paint Sprayer, and Technician: Industrial.

These firms currently employ 444 workers in the shortage occupations, 14 of whom are expected to retire during the next five years.

2.b. Expansion Plans and Recruitment Outlook

Half of the respondents plan to expand their firms during the next twelve months, and all expect recruitment difficulties. Machinist, Assembler: Lead Hand, Die Designer, Electronic Engineer, and various types of Machine Operators are frequently cited as "difficult" or "very difficult" positions to fill. Most of the employers who will need to hire new employees for these positions believe that recruitment will be difficult because applicants will lack a combination of specialized skills and on-the-job experience. Other positions for which recruitment is expected to be difficult are Artist, Machine Tool Assembler, Assembler: Fitter, Chemical Worker, Mechanical Draftsman, Industrial Engineer, Materials Engineer, Mechanical Engineer, Fabricator, Sheet Metal Fabricator, Finisher, Foreman, Tool Grinder, Heat Treater, Skilled Labourer, General Maintenance, Machine Maintenance, Cabinet Maker, Tool Maker, Tool-and-Die Maker, Manager, Maintenance Mechanic, Metal Worker, Millwright, Quality Control Inspector, Equipment Repairer, Salesman, and Industrial and Electrical Technicians.

The current strategies most widely used to ensure that increased manpower requirements will be met are taking a skill inventory of present staff to see whether specific requirements can be met internally with on-the-job training, and advertising in newspapers. A number of employers are already providing apprenticeship or on-the-job training for new employees, and an equal number plan to take this action in the future.

2.c. Employer Concerns and Special Problems

The need for better training is the main concern among respondents from this area. One respondent advocates a national apprenticeship programme for machinists, tool-and-die makers, and mechanics; another employer in the Paper and Allied Industries suggests an industry-wide three-year certificate course so that graduates can be trained for specific needs in less than a year. Still another suggests cooperative work-education programmes.

Poor attitudes toward work are also of concern to many

employers. "Many potential employees are unwilling to work for \$3.50 to 4.00 per hour." The "good life" is thought to be too easy to obtain without work, and at least one respondent says that UIC benefits were too close to the minimum wage.

Shortages of lathe operators, machinists, fabricators/assemblers, and welders need an "immediate solution" according to one respondent.

Mississauga

1. Major Manufacturing Industries

The Transportation Equipment Industries account for 16.8 percent of Mississauga's employment in manufacturing, the Metal Fabricating Industries account for 15.0 percent of local employment, the Machinery Industries account for 12.7 percent of local employment, and the Electrical Products Industries account for 12.1 percent--a total of 56.6 percent. Also significant are the Food and Beverage Industries, which have 5.1 percent of employment; the Rubber and Plastics Industries, which have 4.7 percent of employment; the Printing Industries, which have 3.8 percent of employment; the Non-Metallic Mineral Industries, which have 5.0 percent of employment; and the Chemical Industries, which have 7.3 percent of employment.

2. Survey Results

Sixty-three firms employing a total of 7,680 workers responded to the survey from Mississauga. Fifty-one percent of these respondents have fewer than 50 workers each, 28 percent have more than 100 workers each, and 21 percent have between 50 and 99 workers each. In terms of industry, respondents from the Metal Fabricating Industries are the largest group (22 percent); next largest are respondents from Electrical Products (13 percent), Chemical Products (13 percent), and Machinery (11 percent).

2.a. Current Shortages

Of the 63 Mississauga firms 37 are currently experiencing difficulty filling a total of 172 positions in the following occupations: Analyst: Systems (17), Assembler: Lead Hand (2), Assembler: Skilled (10), Clerk: Production (5), Finisher: Metal (6), Labourer: Unskilled (6), Labourer: Semi-Skilled (17), Labourer: Skilled (2), Machinist (22), Maintenance: Building (5), Maintenance: Electrical (1), Mechanic (2), Tool Maker (15), Die Maker (3), Tool-and-Die Maker (1), Cabinet Maker (1), Operator: Press (4), Operator: Drill (1), Operator: Saw (1), Salesman (8), Welder: Industrial (5). These firms currently employ 593 workers in the shortage occupations, and 24 of these workers are expected to retire during the next five years.

2.b. Expansion Plans and Recruitment Outlook

Fifty-seven percent of the respondents from Mississauga plan to expand their businesses during the next twelve months.

All but four of them foresee difficulty in hiring for their future manpower requirements. Machinist is among the jobs most frequently cited as problematic - all the firms planning to hire Machinists expect this position to be very difficult to fill. Some employers believe there will be no applicants, and others believe that applicants will lack either specialized skills and on-the-job training. Machine Lathe Operator, Industrial Welder, and Welder-Fitter will also be difficult jobs to fill for the same reasons, and a few employers also indicate that a lack of academic training will be an obstacle to finding good welders. A lack of academic training is given as the reason for the expected difficulty in hiring salesmen and managers. Industrial technicians are also expected to be difficult to recruit, because of a lack of specialized skills or on-the-job experience.

In order to ensure that future manpower requirements will be met approximately half the firms are carrying out a variety of activities such as taking a skill inventory of present staff to see whether their specific requirements can be met internally with or without additional training. About 20 percent of these firms plan various future actions, most notably providing apprenticeship or on-the-job training, recruiting outside Canada, sending company representatives to community schools and training institutions for recruitment purposes, and consulting an Ontario Government representative about setting up training courses.

2.c. Employer Concerns and Special Problems

Unrealistic attitudes toward work and the easy availability of UIC benefits are the foremost concerns here. One employer believes that UIC benefits should be given only on the condition that the recipient learn a trade. Others report a lack of discipline, motivation, and direction among prospective workers. One respondent says that these shortages have existed for years, and that we must now start "selling" the trades to high school students.

Also important is the inadequacy of training, which some employers feel produces workers who are unable to reason and to deal with problems that arise in on-the-job situations. Cooperation among government, schools, and industry in developing training programmes is needed. One employer says that the high pay won by large unions has undermined the willingness to undergo lengthy apprenticeship training, and suggests that the government should set up and subsidize a programme obliging employers to give on-the-job training.

Immigration regulations are criticized as well. One employer notes that since skilled tradesmen need years of

training the regulations excluding immigrants for jobs for which "a Canadian can be trained" prohibit what in many cases may be the only short-term solution to a costly problem.

Set-up men, machinists, and foundry workers are mentioned as being especially difficult to find here.

Oakville

1. Major Manufacturing Industries

Oakville is dominated by the Transportation Equipment Industries, which account for almost 67 percent of the local employment in manufacturing that is reported by CM. The Ford Motor Company's truck and assembly plant, which employs over 7,000 workers, and the Mack Trucks Canada Ltd. assembly plant are the two major firms here. Metal Fabricating Industries are the next largest employers in the area, having 21 percent of local manufacturing establishments but only 6.5 percent of local employment in manufacturing.

2. Survey Results

Fourteen Oakville firms employing a total of 989 workers responded to the survey. Only four of these firms employ more than 50 employees each. Three firms are in the Metal Fabricating Industries, two are in Miscellaneous Manufacturing (Instruments), and two are in Transportation Equipment. Other firms responding manufacture a variety of products, including Electrical Products, Primary Metals, Machinery, and Wood Products.

2.a. Current Shortages

Nine of the sixteen employers who responded to the survey are facing shortages. They are finding it hard to fill a total of 39 positions in the following occupations: Welder: Welder Fitter (7), Industrial Welder (5), Pressure Welder (4), Assembler (9). "White-collar" jobs such as Secretary, Engineer, and Draftsman account for a total of six openings, and the remainder are scattered among various "blue-collar" jobs. The nine firms reporting shortages now employ a total of 65 workers in the shortage occupations. Only two of these workers are expected to retire during the next five years, both in one job category in one firm.

2.b. Expansion Plans and Recruitment Outlook

Eleven of the fourteen employers from Oakville are planning to expand their firms during the next twelve months. Only one employer expects to carry out his expansion without hiring difficulties, because he believes it will be "easy" to find General Production Assemblers. Others expect recruitment to be "very difficult" for various types of Welders, including Industrial Welders, Oxy-Acetylene Welders, and Welder Helpers. The primary reason cited for this bleak outlook is

that applicants will lack on-the-job experience. Other reasons cited are a lack of academic training and specialized skills, a lack of applicants for these jobs, and the difficulty a small shop owner has attracting qualified applicants. The recruiting of various kinds of Skilled Assemblers is also expected to be "very difficult" or "somewhat difficult"; and although most employers indicate a lack of specialized skills, on-the-job experience, and academic training as main reasons, one employer believes that it will be difficult to hire these workers simply because of a "lack of willingness to work." The outlook for hiring most "white-collar" personnel is equally pessimistic. Engineers are thought to lack on-the-job experience, and draftsmen, estimators, and computer personnel are thought to lack specialized skills.

Of the 30 types of jobs cited by the ten firms as necessary to carry out their expansions eleven are believed to be "somewhat difficult" to fill, fifteen "very difficult" to fill, and only four "easy" or "very easy" to fill.

Two employers are already taking action to ensure that their increased manpower requirements will be met, while two are contemplating such action in the future. The remaining six cited both current and future actions. In addition to placing advertisements in the help-wanted sections of newspapers eight employers are using or will use private placement agencies, seven are using or will use CECs, seven are taking a skill inventory of their present staffs to see whether their skill requirements can be met internally with on-the-job training, six are already providing on-the-job training or have apprentices and one plans to do so shortly, and several firms are sending representatives to recruit in local schools. Only four employers indicate that they may begin hiring in the U.S. or overseas.

2.c. Employer Concerns and Special Problems

In Oakville, as elsewhere, employers regard the problem of poor motivation is regarded as serious, especially among workers in their twenties. One respondent suggests that more "PR" work must be done for the trades. Other problems include the lack of success in getting help through CECs, the high cost of training specialized workers for firms that produce unique products--in this case surgical supplies--and the difficulty of finding experienced welders and technical sales people. One small welding firm owner reports that he cannot expand from his present work-force of ten employees to a projected work-force of 50 because vital skills are not available: "the people are there but the skills are not." The need for cooperative training is mentioned by one respondent, and another suggests that immigration laws be revamped to encourage an influx of highly trained people.

Guelph

1. Major Manufacturing Industries

The most important manufacturing group in Guelph is the Electrical Products Industries, which employ almost 30 percent of the local manufacturing labour force. The second-most-important group of employers is in the Metal Fabricating Industries, which account for 15 percent of local employment and 20 percent of local manufacturing firms. Scott's reports that Machinery and Primary Metals are important employers as well.

2. Survey Results

The 16 Guelph employers who responded to the survey employ a total of 2,850 workers. Three firms have over 500 workers each, four between 100 and 499 each, six under 50 each, and the rest between 50 and 99 each. The respondents represent the Electrical Products, Metal Fabricating, Paper and Allied, Transportation Equipment, Rubber and Leather, Construction, and Textiles and Clothing Industries.

2.a. Current Shortages

Nine of the 16 firms are having difficulty hiring skilled tradesmen and other professionals. They are trying to fill at least 55 positions in the following occupations: Welder: Fitter, including Lead Hand (20) and Industrial Welder (1); Operator: Drilling Machine (5), N.C. (4), Other (2); Electrician: Wirer (1) and Electrician: General (8); Engineer: Electrical (2) and Engineer: Industrial (1); Semi-Skilled Labourer (4); Machinist: General (1); Tool Maker (at least 3); Mechanic: Heavy Equipment (1); and Maintenance (2).

These firms now employ 230 workers in the shortage occupations and seven of these workers are expected to retire during the next five years.

2.b. Expansion Plans and Recruitment Outlook

Nine of the 16 firms in Guelph are planning to expand their employment during the next twelve months and eight expect recruiting problems. Seven of these firms are already experiencing shortages. Four of the eight employers expect recruiting difficulties for all of their additional manpower requirements.

Recruiting for Welder: Fitters in two firms is expected

to be "very difficult," because applicants lack specialized skills and on-the-job experience. This difficulty extends to the position of Lead Hand as well, for which no applicants are expected at all. Two respondents believe that it will be "very difficult" to recruit Machinists, either because potential applicants will lack specialized skills and on-the-job experience or because no one will apply for these jobs. Other positions expected to be "very difficult" to fill are Tool-and-Die Maker, Tool Maker, Millwright, Special Skills Operator, Manager: Marketing, and Engineer: Research and Development. A lack of specialized skills and on-the-job experience are cited as shortcomings of applicants for the professional positions, and applicants for the position of Manager are expected to lack academic training.

Two respondents expect recruiting to be "somewhat difficult" for semi-skilled labour, because applicants lack on-the-job experience; for Paint Sprayer and Machine Operator, because applicants lack both on-the-job experience and specialized skills; for Inspector, because they lack specialized skills; and for Manager with Industrial Engineering Skills, because applicants lack on-the-job experience.

It is expected to be "easy" or "very easy" to fill positions for various Clerks and Assemblers, Secretary, Drawer, Draftsman, Accountant, Sales Personnel, Operator, Unskilled Labourer, and Welder: Industrial.

The action employers most often report they are taking or will take to ensure that their increased manpower needs will be met is that of providing apprenticeship or on-the-job training for new employees. The second-most-popular strategies are taking a skill inventory of present staff to see whether the specific requirements can be met internally with on-the-job training, and placing advertisements in the newspapers. Five of the eight employers who expect future difficulties are conferring with Ontario Government representatives about setting up training or seeking other manpower assistance.

2.c. Employer Concerns and Special Problems

Most respondents here report specific job needs: finding machinists, tool-and-die makers, mechanics, and trained salesmen is a constant problem. Again, some respondents emphasize the need for government-sponsored apprenticeship programmes that spread the burden of training among employers according to the size of their labour force. One respondent says that the job retraining colleges in the area are "totally inadequate."

Kitchener-Waterloo

1. Major Manufacturing Industries

The Rubber and Plastics Industries are the largest employers in manufacturing in Kitchener, accounting for over 22 percent of local employment, according to CM. The Food and Beverage Industries account for 17.8 percent of local employment, while the Metal Fabricating Industries account for 10.5 percent of local employment and 20.5 percent of local establishments. The Leather Industries are also important here, though much less so than the other three industries: they account for 4.6 percent of local employment. Scott's reports that the Primary Metal Industries, the Machinery Industries, and the Transportation Equipment Industries are significant employers as well.

The Electrical Products Industries are the main employers in the Waterloo area, according to POM and Scott's. CM reports that the Metal Fabricating and Furniture Industries are also important here, accounting for 11.5 percent and 11.4 percent, respectively, of local employment in manufacturing. The Food and Beverage and Textiles Industries are important here as well.

2. Survey Results

Thirty-two firms employing a total of 6,834 workers responded to the survey from Kitchener-Waterloo. Eighteen firms employ fewer than 99 workers each, nine employ between 100 and 499 workers each, and five employ more than 500 workers each. The thirty-two firms belong to the following industry groups: Electrical Products, Non-Metallic Mineral Products, Construction, Machinery, Wood Products, Chemical Products, Transportation Equipment, Metal Fabricating, Textile and Clothing, Printing, Rubber and Leather Products, Paper and Allied, and Miscellaneous Manufacturing. Almost half of the 32 firms belong to the Chemical Products, Textile and Clothing, Transportation Equipment, and Machinery Industries, and account for nearly 87 percent of the total employment reported.

2.a. Current Shortages

Nineteen of the 32 respondents are currently experiencing a shortage of skilled workers. They are trying to fill at least 171 positions in the following occupations: Analyst: Systems (40), Engineer: Electrical (30), Operator: Knitting/Sewing (21), Machinist: General (12), Tool-and-Die Maker (8), Operator: Lathe (7), Operator: Milling Machine (6), Skilled

Labourer (6), Welder: Fitter (6), Engineer: Chemical (3), Foreman: Production Supervisor (3), Mechanic: Heavy Equipment (3), Buyer (2), Engineer: Mechanical (2), Semi-Skilled Labourer (2), Maker: Mould (2), Maker: Pattern (2), Manager: Administration (2), Operator: Boring Mill (2), Operator: Brake-Press (2), and 1 position each for Engineer: Industrial, Fabricator, Maintenance: General, Mechanic: Maintenance, Operator: Oven, Inspector: Quality Control, Shoemaker, Sprayer: Paint, Technologist, and Welder. More than half of the total shortages were reported by the Machinery Industries. The 19 firms reporting current hiring difficulties now employ 513 workers in the 30 occupations identified, more than 30% as Operators, and they expect that 26 workers will retire during the next five years.

2.b. Expansion Plans and Recruitment Outlook

Twenty-one employers, 16 of whom are experiencing shortages, plan to hire more workers during the next twelve months, and they expect hiring for the jobs they must fill to range from "very easy" to "very difficult." Among the positions that employers in the Construction, Printing, Non-Metallic Minerals, Machinery, Chemical Products, Transportation Equipment, Metal Fabricating, and Textile and Clothing Industries expect to be "very difficult" to fill are Tool and Die Maker, Shoemaker, Welder: Fitter, Operator: Sewing, Maintenance: General, Fabricator: General, Machinist, Salesman, Technologist: Electronic, Sprayer: Paint, Mechanic: Maintenance, and Maker: Tool, because applicants lack specialized skills or on-the-job experience or both. Positions for Manager: Administration, Inspector: Quality Control, and Foreman: Production Supervisor are also expected to be "very difficult" to fill, because applicants lack the necessary skills and on-the-job experience. Positions that are expected to be "very difficult" to fill simply because there are no applicants include: Tool and Die Maker, Assembler: Mechanical, Maker: Pattern, and Maker: Mould.

Positions that employers in the Construction, Miscellaneous Manufacturing, Printing, Electrical Products, Machinery, Chemical Products, and Metal Fabricating Industries expect to be "somewhat difficult" to fill are Apprentice, Estimator, Sprayer: Fibreglass, Machinist, Draftsperson, Salesman, Mechanic: Heavy Equipment, Maker: Parts, Welder, Operator: Spring Machine, Engineer: Design, Assembler, and Welder-Fitter because applicants lack specialized skills or on-the-job experience or both. Also expected to be "somewhat difficult" to fill are Assembler: Fitter and Skilled Labourer, because there are no applicants, and Operator: Sewing, because of high turnover.

Positions that employers in the Miscellaneous Manufacturing, Printing, Wood Products, Non-Metallic Minerals, Electrical Products, Transportation Equipment, and Machinery Industries expect to be "very easy" or "easy" to fill are Assembler: General Production, Semi-Skilled Labourer, Operator: Press, Assembler: Electronic, Unskilled Labourer, and Clerk: Shipping. Two firms in Wood Products and one in Miscellaneous Manufacturing do not expect any difficulty filling openings for skilled tradesmen.

The most common recruitment strategy is sponsoring apprenticeship or on-the-job training or both and placing ads in the help-wanted sections of newspapers. Twelve employers anticipating expansion are now using these strategies and 6 plan to use them in the future. Recruiting from within the present work force is the second-most-important strategy. Of the 10 firms that currently use this strategy two plan to continue doing so and five plan to use it in the future. Thirteen firms plan to consult an Ontario Government representative about setting up training or seek other manpower assistance. Nine respondents are using this strategy now and four plan to use it in the future. Eight of the 21 employers planning expansion intend to place job orders with CECs and one plans to continue doing so in the future. In addition to the five firms who now send company representatives to recruit in schools and training institutions, five more plan to use this as a future strategy. Seven firms are planning to place job orders with private agencies, recruit overseas, and recruit in the United States as future strategies in order to ensure that their increased manpower requirements will be met.

2.c. Employer Concerns and Special Problems

The need for more and better apprenticeship training and the difficulty of getting and keeping apprentices are foremost in the responses from employers in this area. Respondents stress the lack of problem-solving ability among community college graduates, and suggest that academic training be combined with on-the-job experience. Government participation in apprenticeship training is thought by some to be desirable, but one employer says that "red tape" already delays the introduction of "several excellent government programmes" into individual firms.

Turnover during the apprenticeship period, a problem caused both by the relatively low pay apprentices receive and by the lack of ambition, makes some employers wary of spending the time and money necessary to train their own workers. Large firms in the area are also accused of stealing trained apprentices from smaller firms by offering them higher pay and benefits. One respondent suggests that skilled tradesmen be

given more respect because their jobs demand that they know more than unskilled and semi-skilled workers. Another says that more help should be given to the apprentice and less to the businessman; he proposes tax deductions for tools and monetary subsidies for the apprentice during the training period: "our company was built with them (apprentices) and at a profit."

A poor work ethic is also cited by some employers, one of whom suggests that liberal attitudes in the education system are to blame. UIC benefits are thought to be too generous; the situation can be improved, according to another employer, by raising the minimum wage, decreasing UIC benefits below the minimum wage, and establishing "compulsory apprenticeship programmes."

Chemical, mechanical, and electrical engineers are difficult to find because the firms in question (manufacturers of tires, chemicals, and industrial products) have an "inglorious" image. Sewing machine mechanics, mould- and pattern-makers, and toolmakers are also cited as occupations in which there are shortages.

Cambridge

1. Major Manufacturing Industries

The distribution of manufacturing in Cambridge is much like that in the Guelph and Kitchener-Waterloo areas. Metal Fabricating Industries comprise over 25 percent of local employment in manufacturing, according to CM. The second most important manufacturer is the Electrical Products Industry, which, according to CM, employs 12 percent of local manufacturing workers. The Machinery and Textiles Industries are also important employers here.

The largest individual establishment in Cambridge is Babcock and Wilcox Canada Ltd. This plant, which is part of the Primary Metal Industries, employs about 1,600 workers. The second-largest individual establishment is the CIBA-GEIGY Canada Ltd. Agro Chemicals Division plant, which belongs to the Chemical Industries and employs over 800 workers. Though the industries represented by these two firms are on the whole not among the largest in the Cambridge area, as individual firms they are nevertheless important.

2. Survey Results

Twenty-two firms employing a total of 3,964 workers responded to the survey from Cambridge. Thirteen firms each employ 99 workers or fewer, seven employ between 100 and 499 workers each, and two firms employ more than 500 workers each. These 22 firms represent a wide variety of manufacturing industries: Electrical Products, Chemical Products, Non-Metallic Minerals, Metal Fabricating, Machinery, Transportation Equipment, Textile and Clothing, Primary Metals, Wood, Printing, and Rubber and Leather. Almost 38 percent of the total employment reported is accounted for by firms in the Metal Fabricating Industries.

2.a. Current Shortages

Nine of the 22 respondents are experiencing shortages of skilled workers. They are trying to fill a total of 36 positions in the following occupations: Assembler: General Production (11), Computer Personnel (2), Engineer: Industrial (2), Engineer: Stationary (1), Labourer: Semi-Skilled (2), Labourer: Unskilled (2), Machinist (1), Maintenance: Machine (5), Mechanic: Maintenance (2), Planner: Production (1), Quality Control: Inspector (1), Tool-and-Die Maker (2), and Welder: Fitter (4). Almost 64 percent of these shortages are reported by firms in the Transportation Equipment and

Machinery Industries. The nine employers reporting current shortages employ 115 workers in the 13 occupations identified, and they expect that six of these workers will retire during the next five years.

2.b. Expansion Plans and Recruitment Outlook

Ten employers, four of whom are now experiencing shortages, plan to hire more workers during the next twelve months. The reported degree of difficulty in hiring them ranges from "easy" to "very difficult." Positions that are expected by employers in the Wood, Metal Fabricating, Machinery, and Non-Metallic Minerals Industries to be "very difficult" to fill are Machinist, Welder, Assembler: Fitter, Millwright, Electrician, and Draftsman, all because applicants are thought to lack both the specialized skills and the on-the-job experience that are required. Also expected to be "very difficult" to find are Tool and Die Makers, because applicants lack suitable training as well as specialized skills and on-the-job experience. Grinder: Tool will be "very difficult" to fill because there are no applicants for this job. Machine Operators are expected to be "somewhat difficult" to "very difficult" to find because applicants lack specialized skills, on-the-job experience, practical reasoning abilities, and the desire to perform well. Jobs that will be "very difficult" to fill in the Wood and Printing Industries include Millwright, because applicants lack specialized skills and on-the-job experience; Labourer: Unskilled, because applicants are not willing to work at a steady job; Labourer: Semi-Skilled, because there are no applicants; and Apprentice: Printer-Offset, because applicants lack the necessary academic training and are not willing to accept the low starting wage. Employers in the Electrical Products and Wood Industries expect Labourer: Semi-Skilled, Assembler, and Clerk-Typist to be easy positions to fill. These firms do not expect any hiring difficulties to arise from their planned expansion.

The recruiting strategy cited most often by the eight firms expecting future difficulties is to provide apprenticeship or on-the-job training for new employees; four firms now use this method and one plans to continue doing so in the future. The second most important strategy, mentioned by four employers, is to consult an Ontario Government representative about setting up training or seeking other manpower assistance. Three firms are taking inventory within their current work-force to see if their requirements can be met with or without on-the-job training. Advertising in newspapers and placing job orders with CECs are used as strategies by three firms, two of whom plan to continue using these strategies in the future. One firm from the Primary Metals Industries is placing job orders with a private agency, and plans in the

future to send a company representative to schools and training institutions in the community. Only one employer, a firm in the Metal Fabricating Industries, plans to recruit overseas in the future. None of the eight firms with expansion plans expect to recruit in the U.S.

2.c. Employer Concerns and Special Problems

Two respondents from Cambridge state that some employers have failed to accept their share of responsibility for training the skilled tradesmen that are needed by all; one suggests legislation to compel firms to train apprentices in proportion to their total work-force. Wages are also a problem here: one respondent says that the narrowing of the difference between the wages received by skilled tradesmen and those received by unskilled workers has made the trades less attractive; another says that smaller firms are at a further disadvantage because they cannot afford the higher wages paid by large firms.

The low quality of the workers available and the poor attitudes they have toward their jobs are of concern to some employers. One respondent complains of the lack of reasoning ability in school graduates after the Davis Royal Commission, an ability that employers themselves must now develop in their workers. Another says that it is difficult to get employees who are willing to work at a steady, permanent job.

A very specialized need in the Textiles Industries is for training courses for high pile finishing mechanics; Ontario does not have courses that provide the variety of skills needed for this job.

Stratford

1. Major Manufacturing Industries

The Transportation Equipment Industries are the major manufacturers in the Stratford area, according to Scott's. CM reports that the Machinery Industries and the Metal Fabricating Industries, which account for 14.1 percent and 13.2 percent, respectively, of local employment in manufacturing, are also significant in Stratford.

2. Survey Results

Nine firms employing a total of 2,091 workers responded to the survey from Stratford. Six of these firms each employ 100 to 499 workers, one firm employs 50 to 99 workers, and the remaining two each employ 20 to 49 workers. The nine firms represent the Furniture and Fixtures, Machinery, Metal Fabricating, Printing and Publishing, Rubber and Leather, and Transportation Equipment Industries.

2.a. Current Shortages

Five of the nine employers are experiencing recruitment difficulties. They are trying to fill a total of 37 positions in the following occupations: Machinist (15), Machinist: Set-Up (1), Welder (7), Labourer (6), Electrician (5), Manager: Quality Control (1), Technologist (1), and Assembler: Equipment (1). Machinists account for 15 of the 37 positions, or about 41 percent. More than 64 percent of the shortages are reported by firms from the Machinery Industries.

The five firms reporting difficulties currently employ 98 workers in the eight occupations identified, and they expect that six of these workers will retire during the next five years.

2.b. Expansion Plans and Recruitment Outlook

Four employers, three of whom are experiencing shortages of skilled labour, plan to hire more workers during the next twelve months. The degree of difficulty expected in hiring them ranges from "very easy" to "very difficult." Among the positions that are expected by employers in the Machinery, Furniture and Fixture, and Transportation Equipment Industries to be "very difficult" to fill are Welder, Engineer: Stationary, Electrician: Electronic, and Mechanic: Maintenance, all because applicants lack specialized skills and on-the-job experience, and Machinist: General, because applicants lack

the necessary specialized skills. The position of Chemical Laboratory Technician is also expected to be "very difficult" to fill, because applicants are thought to lack the necessary academic training. Positions that will be "somewhat difficult" to fill are Assemblyman, Operator, and Operator: Press, because applicants lack on-the-job experience, and Manager: Quality Control, because applicants lack specialized skills. Positions that are expected to be "very easy" or "easy" to fill by employers in the Metal Fabricating, Furniture and Fixture, and Transportation Equipment Industries are Assembler, Welder, Technician, Material Handler, and Operator: Sewing. A firm in the Metal Fabricating Industries does not expect any difficulty in filling openings for skilled tradesmen.

In order to ensure that their increased manpower requirements will be met all three of the respondents expecting shortages plan to sponsor apprenticeship or on-the-job training or both, consult an Ontario Government representative about setting up training or seek other manpower assistance, advertise in the newspapers, and place job orders with CECs. All three employers are now using these strategies and two plan to continue doing so in the future. Two plan to recruit from within their current work-force if their specific requirements can be met with on-the-job training. One firm already does so, and the other plans to do so in the future. One firm from the Transportation Equipment Industries is placing job orders with a private placement agency as well as sending company representatives to recruit in schools and training institutions. This firm also plans to recruit in the U.S. and overseas in the future.

2.c. Employer Concerns and Special Problems

No responses to the open-ended question were received from this area.

Toronto

1. Major Manufacturing Industries

Employment in the City of Toronto and its surrounding boroughs is more diversified than in most other major centres. Nevertheless, manufacturing here is dominated by four major industries--the Food and Beverage Industries, Metal Fabricating, Printing, and Electrical Products--which together comprise over 57 percent of Toronto's manufacturing establishments and 53 percent of its employment in manufacturing. The Food and Beverage Industries are the largest employers here, accounting for over 12 percent of the work-force in manufacturing in Toronto; Metal Fabricating is the second largest, accounting for 11.4 percent of local employment in manufacturing; the Printing and Electrical Products Industries account for 10.6 percent and 10.0 percent, respectively. The other significant manufacturing industries are Chemical Products, which account for 6.1 percent of local employment in manufacturing; Clothing (5.9 percent); Paper (5.7 percent); Machinery (5.2 percent); and Furniture (4.5 percent).

2. Survey Results

Three hundred and sixty-six firms employing a total of 44,760 workers responded to the survey from Metropolitan Toronto. Fifty-five percent of the respondents employ fewer than 50 workers each, 15 percent between 50 and 99 workers each, 25 percent between 100 and 499 each, and 6 percent employ more than 500 each.

All manufacturing industries are represented in the survey results from the Toronto area. The largest proportion of respondents (20 percent) is from the Metal Fabricating Industries, where nearly two out of every three responding firms have fewer than 50 employees each. Respondents from the Electrical Products Industries form the second-largest group (10 percent); in this industry over 70 percent of the respondents have more than 50 employees each. Third largest is the Printing and Publishing Industries, which account for 7 percent of the responses; 76 percent of these firms employ fewer than 50 workers each. The Chemical Products Industries also account for 7 percent of the responses, but the responses received from these industries differ from those received from Printing and Publishing in that over 61 percent came from firms that employ more than 50 workers each.

2.a. Current Shortages

Fifty-two percent of the respondents from Metropolitan Toronto indicate that they are currently experiencing shortages. These firms are trying to fill a total of 1,013 positions. Approximately 90 percent of these openings are for the following occupations: Assembler: Production (20), Fitter (16), Mechanical (12), Electronic (8), and Lead Hand (12); Systems Analyst (7); Computer Personnel (12); Clerk: Sales and Shipping (10); and General (10); Engineer: Electrical (24), Industrial (15), and Mechanical (7); Estimator (5); Chemical Worker (5); Finisher (8); Metal Finisher (8); Production Foreman (12); Labourer: Semi-Skilled (33) and Skilled (18); Electrician (5), Electrician: Wirer (14); Maintenance: Machine (7); Machinist (110); Maker: Mould (16), Tool-and-Die Maker (56), Cabinet Maker (42); Manager (9), Mechanic: General (5), Industrial (6), Machine (9), and Maintenance (10), Millwright (7); Operator: Boring Mill (14), Header (6), Lathe (17), Milling Machine (7), Mould (5), Press, Brake or Punch (20), Screw Machine (5), Thread Roll (8); Operator: Sewing Machine (49), Operator: Office Machine (9), Operator: Other (20); Quality Control: Inspector (14); Body Repairman (7); Equipment Repairman (5); Sales: General (6), and Customer Service (12); Sign Painter, Installer (5), Technician: Electronic (11); Trouble Shooter (51); Upholsterer (8); and Welder: Industrial (22) and Fitter (22).

The respondents experiencing shortages currently employ 3,216 workers in the occupations identified. In other words, the 1,013 positions that are currently hard to fill constitute one-third of the manpower employed in the shortage occupations by the responding firms. At least 162 of these workers, or 4.8 percent, are expected to retire during the next five years. In some occupations, however, the proportion of workers expected to retire is much larger: 9.0 percent of the Machinists, 11.4 of the Tool-and-Die Makers, 7.6 percent of the Cabinet Makers, 8.6 percent of the Lathe Operators, and 13.7 percent of the Millwrights are expected to retire during this period.

2.b. Expansion Plans and Recruitment Outlook

Fifty-four percent of the Toronto respondents plan to expand their businesses, and about 90 percent expect it will be difficult to recruit the additional workers that their expansion plans will require.

The reasons for their pessimism are varied. Respondents most often say that they expect potential applicants to lack the necessary specialized skills and on-the-job experience that the new positions will require. The second-most-common

reason is the expectation that no applicants at all will apply for the new jobs. A lack of academic training and on-the-job experience ranks third in frequency, and a lack of specialized skills fourth.

The jobs cited most often as being either "somewhat difficult" or "very difficult" to fill are Machinist, Tool-and-Die Maker, Lathe Operator, Assemblers: Lead Hand, Foreman, and Cabinet Maker. Machinists and Tool-and-Die Makers are expected to be difficult to hire either because applicants lack the requisite specialized skills or because no one is expected to apply for these jobs. Lathe Operators and Cabinet Makers are expected to be difficult to hire because applicants lack specialized skills or on-the-job experience, while Foreman are expected to be difficult to hire because applicants lack on-the-job experience. Recruiting is also expected to be difficult for Assembler-Fitter, Metal Finisher, Machine Maintenance, Maintenance Mechanic, Millwright, Milling Machine Operator, Quality Control Inspector, and Welder-Fitter.

A somewhat more favourable view is taken by a minority of employers who believe that recruiting may be "easy" or "very easy" for Engineer, Inventory Control Clerk, Manager, Press, Brake and Punch Operator, Salesman, and Industrial Welders. Those employers who do not share their optimism think that Engineers will be difficult to hire because no one will apply or because those who do will lack on-the-job experience, and that Managers and Salesmen will be difficult to find because of a lack of on-the-job experience or specialized skills.

Well over half of the employers expecting difficulties are already carrying out most of the usual recruitment strategies to ensure that their future manpower requirements are met. However, a substantial number of respondents plan to take additional action in the future. The main activity planned for the future is providing apprenticeship or on-the-job training to new employees. Forty-nine percent of these firms are already training new employees and another 22 percent plan to do so in the future. Much of this activity is planned by firms in the Metal Fabricating and Machinery Industries, which account for slightly more than one-third of all respondents expecting recruitment difficulties.

Some firms also plan to recruit outside Canada; 8.2 percent of the respondents are now trying to recruit overseas, and 15.5 percent plan to do so in the future. A number of firms also plan to recruit in the U.S. in the future, though only a few do so now.

Twelve percent of all respondents plan to send company representatives to local community schools and training insti-

tutions and a similar proportion plan to take inventory of their present staff to see if their manpower requirements can be met internally with on-the-job training. Almost 14 percent plan to consult an Ontario Government representative for training assistance.

2.c. Employer Concerns and Special Problems

Though it is impossible to summarize all of the many comments received from employers in Toronto we can isolate a few of their predominant concerns. Uppermost in their minds is the problem of poor attitudes among young workers--their lack of drive, their expectation of high pay without skills or experience, their "do-your-own-thing" attitude, and their lack of discipline. Several respondents state that the schools were responsible for correcting this problem: "Let's get realistic and stop kidding students in the universities, get them into a skilled labour situation." Another was "amazed" at how "ill-prepared some people are for industrial employment." Here, as elsewhere, many employers think UIC benefits are much too generous.

Second in importance is the need for a national government-sponsored apprenticeship system. Canada is not training enough skilled people to meet the diverse needs of Canadian industry. Those who are being trained often do not have enough practical experience or specialized knowledge, and there are some trades--plastic spray painters, wrapping-machine mechanics, ceramic engineers, and others--for which people are not being trained at all. Foreign-born workers are better-trained than many Canadians, but "the well is running dry." Some companies are delaying expansion or suffering losses of business because the skilled labour they need is not available; others are automating their plants to avoid reliance on the undependable supply of Canadian skilled labour.

A number of respondents criticize the Canada Employment Centres, which are considered to be ineffective in screening applicants for highly skilled jobs and insensitive to the needs of some employers; in the words of one frustrated employer, "they do not want to understand our problem, they just do not care."

Another serious problem is the competition among firms for limited supplies of skilled tradesmen. "Excessive wages and benefits" can be used to steal skilled workers, the smaller firms usually complaining of such predatory behaviour from larger, richer firms. "Until all companies are required to hire apprentices in an established numerical ratio to skilled employees and by legislation collective agreements have standard seniority and apprentice agreements, this country

will continue to have a shortage of skilled workers."

Welders and Machinists, Maintenance Mechanics, Cabinet Makers, Cutters, Sewing Machine Operators, and Millwrights are among the tradesmen most frequently noted as being difficult to hire. One employer says that the Automatic Screw Machine trade should be licenced, since qualified operators are almost unavailable. He has raised this problem in the past, he says, but nothing has been done.

Burlington

1. Major Manufacturing Industries

The Metal Fabricating Industries are by far the most important manufacturers here. CM estimates that the industries comprise 25 percent of local employment in manufacturing establishments. The Non-Metallic Mineral Industries and the Food and Beverage Industries are also significant employers.

2. Survey Results

Fourteen firms employing a total of 690 workers responded to the survey from Burlington. All but three of these firms employ fewer than 100 workers. The industry groups represented by the responding firms are Chemical Products, Machinery, Transportation Equipment, Metal, Petroleum, Food and Beverage, Paper, Primary Metals, and Miscellaneous Manufacturing.

2.a. Current Shortages

Only two of the 14 firms are having recruitment difficulties. They are trying to fill a total of 9 positions in the following occupations: Machinist: General (1), Assembler-Fitter (4), Electrician (2), Salesman: Customer Service (1), and Engineer: Control (1). The two firms reporting shortages employ a total of 28 workers in the shortage occupations, and one of these workers is expected to retire during the next five years.

2.b. Expansion Plans and Recruitment Outlook

Eight of the 14 respondents are planning to expand their firms during the next twelve months, and two of these are the firms now experiencing recruitment difficulties. Three of the eight employers who want to expand their employment expect no problems hiring workers, because they will need only Operators and Labourers, who are relatively easy to find. Two other employers expect no problems hiring for these types of jobs, but are expecting difficulties in recruiting Foremen, General Maintenance workers, and Salesmen: Customer Service, because these positions require specialized skills or on-the-job experience that applicants are expected to lack. Three employers expect difficulty recruiting all the additional tradesmen they will need. The jobs expected to be "very difficult" to fill are General Machinist, Welder, Assembler-Fitter of Machine Tools, Electrician, Salesman: Customer Service, and Controls Engineer. Machinist and Mechanical Engineer are expected to be only "somewhat difficult" to fill.

As reasons for the expected hiring difficulties employers cite a lack of on-the-job experience for Foreman, Electrician, Machinist, and Mechanical Engineer, and a lack of specialized skills for Salesman: Customer Service and Control Engineer. Both reasons are cited for potential applicants for Machinist, General Maintenance, and Welder. Employers believe that there will be no applicants at all for the position of Assembler-Fitter.

The strategies used most widely to ensure that increased manpower requirements will be met are placing advertisements in the help-wanted sections of newspapers and sponsoring apprenticeship and on-the-job training for new employees. All eight employers are already placing ads and two plan to do so in the future, while four employers are training new employees and one expects to begin doing so shortly. Four employers rely on the services of the CECs and three are seeking help from the Ontario Government. Three are also taking an inventory of the skills of their present staff to see whether their specific requirements can be met internally with on-the-job training.

2.c. Employer Concerns and Special Problems

In the very few responses received from Burlington, the lack of motivation among workers and the need for government-subsidized on-the-job training appear to be the two main concerns.

Hamilton

1. Major Manufacturing Industries

Unquestionably, the Primary Metal Industries are the major manufacturers in Hamilton. CM estimates the employment in this industry to be almost 39 percent of local employment in manufacturing. The second major group of manufacturing industries is Metal Fabricating which, according to CM, employs over 13 percent of the local work-force in manufacturing. The Food and Beverage Industries and the Electrical Products Industries are also major employers here, having approximately 7 percent and 9.5 percent, respectively, of total manufacturing employment.

2. Survey Results

Thirty-six firms employing a total of 18,000 workers responded to the survey from Hamilton. Twenty-three firms employ fewer than 99 workers each, seven employ between 100 and 499 workers each, and six firms employ more than 500 workers each. The 36 respondents belong to the following industry groups: Food, Beverage and Tobacco Products, Textile and Clothing, Wood Products, Paper and Allied, Printing, Primary Metals, Metal Fabricating, Machinery, Electrical Products, Non-Metallic Mineral Products, Chemical Products, and Miscellaneous Manufacturing. More than half of the respondents were from the Metal Fabricating and Machinery Industries.

2.a. Current Shortages

Eighteen of the 36 respondents are currently experiencing shortages. They are trying to fill at least 88 positions in the following occupations: Apprentice (2), Assembler: Electronic (2), Assembler: Machine (8), Computer Personnel (1), Designer: Textile (1), Electrician: General (1), Engineer (2), Grinder: General (1), Layout: General (2), Machinist (12), Machine Tool Setter (2), Maintenance: Electrical (1), Cabinet Maker (2), Mould Maker (2), Manager: Administration (1), Mechanic: Maintenance (1), Millwright (2), Operator (3), Operator: Boring Mill (3), Operator: Burner (1), Operator: Coiler (2), Operator: Drill (3), Operator: Equipment (2), Operator: Frame Machine (2), Operator: Knitting/Sewing (8), Operator: Lathe (6), Operator: N.C. Machine (3), Operator: Press (3), Operator: Shear (2), Pipefitter (1), Quality Control: Inspector (1), Technician: Industrial (1), Tool Maker (1), and Welder: Fitter (3). Machinists and Operators account for 50 of the 88 positions, or almost 57 percent. Nearly one-third of the total shortages are reported by firms in the

Metal Fabricating Industries. The 18 firms reporting current hiring difficulties now employ 451 workers in the 34 occupations identified, more than half as Assembler: Machine, Machinist: General, Operator: Boring Mill, and Operator: Sewing, and they expect that 36 workers will retire during the next five years.

2.b. Expansion Plans and Recruitment Outlook

Sixteen firms, nine of whom are experiencing shortages, plan to hire more workers during the next twelve months, and they expect that hiring for the jobs they need to fill will range from "very easy" to "very difficult." Among the positions that employers expect to be "somewhat difficult" or "very difficult" to fill are Assembler: Machine, Baker, Computer Personnel, Operator: Coating-Plating, and Welder: Fitter, because applicants lack the necessary specialized skills, and Labour: Unskilled and Manager: Administration, because applicants lack on-the-job experience. Positions that will be difficult to fill because applicants lack both specialized skills and on-the-job experience are Assembler: Fitter, Layout: General, Machinist: General, Cabinet Maker, Operator: Burner, and Salesman. Technician: Industrial is expected to be difficult to fill because applicants lack both the academic training and specialized skills required for the position. Employers expect that Assembler: Electronic, Operator: Coiler, Operator: Sewing, Operator: Lathe, Operator: Still, and a number of unspecified operators will be "very difficult" to hire because there will be no applicants at all, but they expect it to be "easy" or "very easy" to fill positions for Analyst: Marketing, Baker: Helper, Clerk: General, Operator: Cutter, and Operator: Ram Straightener.

In order to ensure that their increased manpower requirements will be met employers plan to recruit from within their present work-force, sponsor apprenticeship or on-the-job training, advertise in newspapers, and place job orders with CECs. Several firms are using these strategies now. Less-frequently-used strategies include: placing job orders with private agencies, consulting an Ontario Government representative about training courses, recruiting in schools and training institutions, and recruiting in the U.S. and overseas.

2.c. Employer Concerns and Special Problems

Many of the respondents from Hamilton indicate that they rely on in-house training to fill their needs for skilled labour, either because people are not trained in the skills they require (a problem in the case of cabinet makers) or because those who are supposed to be fully trained are not actually capable of doing the jobs for which they are hired.

One employer has an agreement with a local vocational school to provide on-the-job training in sheet-metal work. Another has hired graduates from 40-week community college training programmes, a period of time he feels is too short to develop specific skills. The same respondent has tried "modular training" which he does not like because the trainee is at work for only part of the year, and apprenticeship, which carries the unacceptable risk of losing the apprentice to another firm after two years of training. Another employer thinks government-assisted in-plant training programmes may be a good short-term solution to shortages of tradesmen, though still another said that current training programmes do not offer companies enough incentives to employers.

Specific shortages are noted in first-line management and the mechanical trades, and one employer complains that it is especially difficult to attract young people into the spring-making trade.

St. Catharines

1. Major Manufacturing Industries

The Transportation Industries are the major employers in St. Catharines: CM estimates that these industries account for almost 57 percent of local employment in manufacturing. The Metal Fabricating Industries are the second-largest manufacturers here, having over 15 percent of local employment, and the Food and Beverage Industries are significant here as well.

2. Survey Results

Seventeen firms responded to the survey from St. Catharines. Since the largest employer in this area has asked that his response not be included in the results at the community level, however, the discussion of returns from St. Catharines will include the results from only 16 employers.

These 16 firms employ a total of 1,400 workers. Ten of these firms have fewer than 50 employees each, two have between 50 and 99 employees each, and four have over 100 employees each. Seven firms are in the Metal Fabricating Industries and three are in Chemical Products. The other respondents to the survey represent the Transportation Equipment, Wood Products, Primary Metals, Construction-Related Manufacturing, and Food and Beverage Industries.

2.a. Current Shortages

The survey data show that five of the 16 firms are experiencing shortages. These firms are trying to fill a total of 23 positions in the following occupations: Senior Shop Labour Estimator (1), Machinist: General(13), Operator: Boring Mill Horizontal (2), Operator: Boring Mill Vertical (2), Cylindrical Grinder (1), Internal Grinder (1), Welder, Class "A" (2), and Layout Technician (1). These five firms now employ 57 workers in the shortage occupations, six of whom are expected to retire during the next five years.

It is worth noting that since these five firms now employ 38 Machinists and are reporting a shortage of a total of 13 Machinists, they are operating with only 75 percent of the Machinists they need.

2.b. Expansion Plans and Recruitment Outlook

Nine of the sixteen respondents to the survey are plan-

ning to expand their firms during the next twelve months, and seven of these nine expect to recruit skilled labour for 23 different positions. Two of these are deemed to be "very easy" to fill (Process Worker and Labourer) and three are deemed to be "easy" to fill (Sales Clerk, Fitter, Baker's Helper).

Nine jobs are expected to be "somewhat difficult" to fill. A lack of specialized skills is cited as the problem in recruiting Millwrights, Electricians, Bakers, and Structural Assemblers-Fitters, and a lack of on-the-job experience in recruiting Managers, Operators of Melt Furnaces, Skilled Labourers, Lab Technicians, and Inspectors.

Nine positions are expected to be "very difficult" to fill. Machinists are singled out by two different firms: one believes that potential applicants will lack the specialized skills needed, while the other believes that there will be no applicants for this job at all. Other positions that are expected to be "very difficult" to fill are Welder, various types of Boring Mill Operators, Casting Machine Operator, Lathe Hand, Grinder Hand, and Die Caster.

Only five of the seven employers who expect to encounter difficulty hiring for their expansion needs indicate what actions they will take to meet their manpower needs. Interestingly, of the two employers who did not respond to this question one feels that qualified applicants will not be available for his job openings and the other has a lengthy list of positions he expects to be hard to fill. The five who did respond have already instituted much of their hiring strategy: taking an inventory of present staff skills for internal training, providing apprenticeship training for new employees, consulting Ontario Government representatives, and placing advertisements in the newspapers. Only two employers expect to take additional action in the future. Their plans include placing job orders with private and public placement agencies, recruitment in the U.S. and abroad, and sending company representatives to local schools.

2.c. Employer Concerns and Special Problems

The comments of respondents from St. Catharines refer mainly to shortages in specific occupations. One employer says that "the lack of skilled people in the machine shop industry is very bad," and warned that it is time to "stop talking and act." Another says that the shortage of machinists has forced him to raise wages to a level that makes his product uncompetitive. A third says that the supply of machinists and welders is "either a feast or a famine"--supplies depend on what other employers in the area are doing. Experienced drop-forged operators are "impossible to hire" despite competitive wages.

Niagara Falls

1. Major Manufacturing Industries

The Non-Metallic Mineral Products Industries are the major employers in Niagara Falls, according to CM; they account for over 28 percent of local employment in manufacturing. Second most important here are the Food and Beverage Industries, which have over 20 percent of local employment in manufacturing. The Chemical Industries, the Metal Fabricating Industries, and the Machinery Industries are also significant in Niagara Falls.

2. Survey Results

Nine firms employing a total of 1,423 workers responded to the survey from Niagara Falls. Six of these firms employ between 100 and 499 workers each. The respondents belong to the Chemical Products, Metal Fabricating, Food and Beverage, and Non-Metallic Mineral Industries.

2.a. Current Shortages

Four of the nine respondents say they are now experiencing shortages. These four firms are trying to hire a total of 13 workers in the following jobs: Chemical Worker (4), Mechanic (3), Assembler-Fitter and Layout Person (4), Electrician (1), and Mechanical Engineer (1). At present they employ a total of 34 workers in these jobs, three of whom are expected to retire during the next five years.

2.b. Expansion Plans and Recruitment Outlook

Two of the four respondents now experiencing shortages plan to expand their firms and they expect further recruitment problems when they do so. Three of the five respondents who are having no recruitment difficulties at present also plan to expand and all expect difficulty finding the workers they need. Difficulties are expected in hiring for the following jobs: Electrician, Machinist, Millwright, Tool Maker, Layout Person, Assembler-Fitter, Welder, Chemical Worker, Chemical Engineer, Machine Maintenance Worker, and skilled workers for the Food and Beverage Industries. The reasons cited for these difficulties are a lack of skills and a lack of on-the-job experience among applicants.

In order to recruit the necessary workers two firms are taking inventory of their present employees to see if any can meet their requirements either with or without on-the-job

training, two are placing advertisements with CECs, and two are planning to train new employees on the job. Firms in the Chemical Products Industries are planning to recruit in schools or other training institutions, place ads in newspapers, and seek manpower assistance from the Ontario Government.

2.c. Employer Concerns and Special Problems

All the respondents from this area agree that the shortage of tradesmen in the Niagara area is acute. One employer says of his trouble in obtaining machinists, millwrights, and toolmakers: "'Very difficult' understates the fact . . .; they are simply not available." The education system has failed, in his view, and Canadian manufacturing will be "in serious jeopardy" if the problem is not corrected. One wine producer says that finding maintenance people and mechanics is his "biggest problem," but that middle-level technicians are "fairly easy" to hire. Another employer suggests that the government give out "less free money" and make everyone work for a living.

Welland

1. Major Manufacturing Industries

The main employers here are the Primary Metal Industries, which CM estimates to account for 54 percent of local employment in manufacturing. Scott's says that the largest firm in this industry is the Steel Company of Canada Limited (Page-Hersey Works and Welland Tube Works), which has over 1,500 employees. Other major manufacturers include Metal Fabricating, Machinery, Electrical Products, and Rubber and Plastics.

2. Survey Results

Five firms employing a total of 3,871 workers responded to the survey from Welland. Two of these firms employ more than 500 workers each and account for almost 88 percent of the total employment among respondents from this area. The five firms represent the Electrical Products, Metal Fabricating, Machinery, and Primary Metals Industries.

2.a. Current Shortages

All five firms are experiencing shortages. They are trying to fill a total of 31 positions in the following occupations: Accountant (1), Die Repair (3), Electrician (6), Foreman (2), Machinist (3), Trimmer Maker (1), Operator (5), Operator: Forge Hammer (6), Pipe Fitter (2), and Tool Designer (2). The Primary Metals Industries account for 23 of the 31 positions, or roughly three-quarters. These five firms now employ 151 workers in the 31 occupations identified, of which about 79 percent are Machine Operators, Electricians, and Pipe Fitters. During the next five years these firms expect 16 workers, or slightly more than 10 percent of the current work-force of 151, to retire.

2.b. Expansion Plans and Recruitment Outlook

Three of the five respondents plan to expand their firms, and two expect future difficulties in recruiting the workers they need. These firms expect to have trouble in filling the following jobs: Die Sinker, Electrical Mechanic, Engineer, Machine Operator, Machinist, Technologist, Tool Designer, Trimmer Maker, and Welder. The main reasons given for the expected difficulties in all cases are a lack of the necessary specialized skills or a lack of on-the-job experience or both.

The two firms that expect future hiring difficulties plan

to recruit from within their existing work-force. Current and future recruiting strategies for both firms include providing apprenticeship or on-the-job training, advertising in newspapers, and placing job orders with private agencies and CECs. Neither of these firms currently recruits or plans to recruit from the United States or overseas.

2.c. Employer Concerns and Special Problems

The general lack of skilled tradesmen is emphasized by respondents from this area. One steel manufacturer says that it is normally difficult to hire millwrights. A farm implements manufacturer reports that there has been a shortage of product and process engineers during the last year; preferences for large urban centres and a lack of confidence in the economy are thought to override the "excellent" starting salaries offered here, and making it difficult to persuade experienced engineers to relocate in Welland. The raiding of smaller firms by larger firms in search of skilled labourers is also cited as a problem.

Brantford

1. Major Manufacturing Industries

The most important manufacturers here are the Machinery Industries, which account for 35.6 percent of local employment in manufacturing. Second-most-important are the Metal Fabricating Industries which, according to CM, account for 18.2 percent of all the establishments in the area and 7.5 percent of local employment in manufacturing. Other major employers in manufacturing are the Transportation Equipment Industries, which account for 6.4 percent of local manufacturing employment, Paper Industries, Chemical Products Industries, Primary Metal Industries, and Electrical Products Industries.

2. Survey Results

Eighteen firms employing a total of 1,835 workers responded to the survey from Brantford. Twelve firms employ fewer than 99 workers each, five employ between 100 and 499 workers each, and one firm employs more than 500 workers. The 18 firms belong to the following industry groups: Textile and Clothing, Wood Products, Non-Metallic Mineral Products, Food and Beverage, Machinery, Printing, Metal Fabricating, Chemical Products, and Miscellaneous Manufacturing. All seven of the firms in Metal Fabricating employ fewer than 99 workers each, and they account for less than 13 percent of the total employment reported. The three largest firms belong to the Machinery Industries and account for more than half of the total employment reported.

2.a. Current Shortages

Eight of the 18 respondents are experiencing shortages. They are trying to fill at least 53 positions in the following occupations: Machinist: General (25), Operator: Lathe (5), Tool and Die Maker (4), Analyst: Production (2), Cabinet Maker (2), Engineer: Design (2), Inventory: Material Control (2), Labourer: Semi-Skilled (2), and one position each for Computer Personnel, Engineer: Mechanical, Foreman: Production Supervisor, Maintenance: Machine, Millwright, Operator: Milling Machine, Operator: Press, Toolmaker, and Welder. Machinists account for 25 of the 53 positions, or almost half of these shortages. More than 80% of these openings are reported by firms in the Metal Fabricating and Machinery Industries.

The eight firms reporting current difficulties now employ 191 workers in the 17 shortage occupations, more than half

of these workers are Machinists, and they expect that 14 workers will retire during the next five years.

2.b. Expansion Plans and Recruitment Outlook

Nine employers, four of whom are currently experiencing shortages, plan to hire more workers during the next twelve months, and they expect hiring for the jobs they need to fill to range from "very easy" to "very difficult." Among the positions that employers in the Chemical Products and Machinery Industries expect to be "very difficult" to fill are Manager: Administration, because applicants lack on-the-job experience, and Tool and Die Maker, because applicants lack specialized skills. Jobs for Machinist, Operator: Lathe, Maintenance: Machine, Analyst: Production, and Inventory: Material Control will be "very difficult" to fill because there are no applicants. Positions that employers in the Textile and Clothing, Machinery, Metal Fabricating, Chemical Products, and Miscellaneous Manufacturing Industries expect to be "somewhat difficult" to fill are Labourer: Semi-Skilled, Salesman, Chemist, Operator: Lathe, Operator: Milling Machine, Operator: Sewing, Foreman, Welder, Mechanic, Draftsman, and Drafter: Design, because applicants lack specialized skills or on-the-job experience or both. Positions that employers in the Wood Products, Chemical Products, and Metal Fabricating Industries expect to be "very easy" or "easy" to fill are Labourer: Unskilled, Assembler: General Production, and Clerk: Shipping.

All eight respondents planning to expand their firms are recruiting from within their present work-force. Advertising in the help-wanted sections of newspapers and placing job orders with CECs are the second-most-important strategies; six respondents are using these strategies now and two plan to use them in the future. Sponsoring apprenticeship or on-the-job training and consulting an Ontario Government representative about setting up training or seeking other manpower assistance are currently used in six firms, and one respondent plans to use them in the future. Five respondents plan both to send a company representative to recruit in schools and training institutions and place job orders with private agencies; four are using these strategies now and one plans to use them in the future. Three respondents plan to recruit overseas and in the United States; one is already using these strategies and two plan to use them in the future.

2.c. Employer Concerns and Special Problems

The need for a "return to the apprenticeship system on a wide scale" is the main concern expressed by respondents from this area. The training courses sponsored by Canada Manpower

and the Ontario Ministry of Agriculture and Food are thought by one employer to be a good but expensive way to get skilled labour. Small employers here, as elsewhere, find it difficult to keep trainees, who are often lured to higher-paying jobs in large firms when their training is complete. The burden of training new tradesmen is thus borne mainly by smaller firms; large companies are thought to be training the fewest people. One respondent also says that union-management relations are not conducive to developing skilled labour in sufficient numbers.

Southwestern Ontario

Woodstock

1. Major Manufacturing Industries

The Machinery Industries employ more than 21 percent of the local labour force in manufacturing, according to CM, and are thus the most important manufacturer in the area. Scott's reports that the Eaton Yale Limited Forestry and Construction Equipment Division is the largest single employer in Woodstock. CM also says that the Transportation Equipment Industries and the Clothing Industries are major employers here.

2. Survey Results

Eleven firms employing a total of 2,413 workers responded to the survey from Woodstock. Six of these firms employ 99 workers or less each, three employ 100 or more each, and two have over 500 employees each. These eleven firms represent the Printing, Primary Metals, Textile and Clothing, Machinery, and Miscellaneous Manufacturing Industries.

2.a. Current Shortages

Seven of the eleven respondents are currently experiencing shortages. They are trying to fill at least 47 positions in the following occupations: Operator (15), Welder (13), Weaver (7), Labourer: Production (4), Maintenance: Machine (2), Machinist (2), Mechanic (2), Industrial Engineer (1), and Supervisor: Maintenance (1). Operators and Welders account for 28 of the 47 positions, or almost 60 percent. More than half of the shortages were reported by firms in the Textile and Clothing Industries and the Machinery Industries.

The seven firms reporting current hiring difficulties employ 217 workers in the nine shortage occupations identified, and they expect that 13 of these workers will retire during the next five years.

2.b. Expansion Plans and Recruitment Outlook

Five employers, four of whom are now experiencing shortages, plan to hire more workers during the next twelve months. The degree of expected difficulty in hiring them ranges from "easy" to "very difficult." Among the positions that are expected to be "very difficult" to fill in the Machinery, Textile and Clothing, Primary Metals, and Miscel-

laneous Industries are Operator: Lathe, Operator: Brake Press, and Mechanic: Hosiery, all because applicants are thought to lack specialized skills and on-the-job experience, and Operator: Machine, because applicants lack the necessary specialized skills.

Positions reported by employers in the Machinery, Primary Metals, Printing and Publishing, and Miscellaneous Manufacturing Industries as "somewhat difficult" to fill are Assembler and Pressman, because applicants lack on-the-job experience, and Machinist, Typesetter, and Welder: Class 1, because applicants lack both specialized skills and on-the-job experience. One firm in Miscellaneous Manufacturing expects the position of Material Handler to be "easy" to fill.

A recruitment strategy used by all five firms is to consult an Ontario Government representative about setting up a training programme or seeking other manpower assistance; two employers are using this strategy and one plans to continue doing so in the future. Four of the five employers planning to expand their firms expect to sponsor apprenticeship or on-the-job training or both; three employers now use this strategy, and one plans to continue doing so. Two strategies mentioned by four of the five firms are advertising in newspapers and placing job orders with CECs. Only two firms, one from the Textile and Clothing Industries, and one from the Machinery Industries, plan to recruit overseas. One firm from the Primary Metals Industries plans to recruit in the United States in the future.

2.c. Employer Concerns and Special Problems

The shortage of welders and machine operators is a special problem here. One large manufacturer of automated process control equipment says that during the next five years he expects to hire 4-8 new machine operators each year merely to replace those lost through attrition, and that will need 8-12 new machine operators each year to carry out the growth his firm is capable of attaining. The uncertainty of the future supply of skilled labour is a source of great concern to him.

Two firms report that they have either lost business or abandoned earlier plans to expand because the necessary skilled labour is unavailable. One small printer reports, however, that he began his own apprenticeship programme ten years ago because none existed in his industry, and that he is happy with the results he has gotten by training graduates from grades 12 and 13 of commercial and technical schools.

London

1. Major Manufacturing Industries

The Transportation Equipment Industries are the largest manufacturers in London; CM reports that these industries employ over 25 percent of the local manufacturing labour force, although they account for only 5 percent of the manufacturing establishments in the area. The Food and Beverage Industries are the second largest group of employers, accounting for 11 percent of local manufacturing establishments and 15 percent of local employment in manufacturing. Next most important are the Electrical Products Industries, which have 10 percent of local employment.

2. Survey Results

Twenty-two firms employing a total of 4,900 workers responded to the survey from London. Eleven of these firms have fewer than 50 employees each and the other eleven have more than 100 each. The industry groups they represent are Electrical Products, Metal Fabricating, Machinery, Transportation Equipment, Primary Metals, Printing and Publishing, Rubber and Leather, Paper and Allied, Wood and Furniture, Chemical, Miscellaneous Manufacturing, and Construction.

2.a. Current Shortages

Eleven firms report having difficulty hiring skilled tradesmen and some kinds of professionals. They are trying to fill a total of 72 positions in the following occupations: Machinist (9), Industrial Welder (5), Welder-Fitter (2), Tool Maker (9), Quality Control Inspector (4), Labourer: Unskilled (15), Pipe Organ Builder (3), Chemical Worker (2), and Engineer: Electronic (5), Production (2), Industrial (2), and Mechanical (1). Other positions that are difficult to fill are Clerk: Accounting (1), Draftsman: General (2) and Mechanical (1), Machine Tool Designer (1), Machine Tool Assembler (1), Control Mechanic (1), General Maintenance (1), Repairer: Equipment (1), Salesman: Customer Service (1), Cutter Operator (1), and Office Machine Operator (2). The eleven firms reporting shortages employ 537 people in shortage occupations, 28 of whom are expected to retire during the next five years.

2.b. Expansion Plans and Recruitment Outlook

Ten of the 22 respondents are planning to expand their firms during the next twelve months, and seven of these are

currently experiencing recruiting difficulties. Of these, ten firms expect hiring for most of their manpower needs to be difficult. Employers believe that applicants will lack on-the-job experience or specialized skills, and they think there will be no applicants at all for the positions of Systems Analyst, Production Engineer, Quality Inspector, Machine Fitter, Tool Loom Machinist, and Chemical Worker with specialized skills. Recruiting is also expected to be "very difficult" for Welders, including Set-Up Welders, because applicants lack specialized skills and on-the-job experience; General Machinists, because they lack on-the-job experience; and Engineers of all kinds, because of the high demand for workers in this category. "Somewhat difficult" to hire are other Chemical Workers, because applicants lack on-the-job experience; Industrial Technicians, because they lack academic training; Accountants, Salesmen, and Draftsmen, because applicants lack job experience; and Skilled Tradesmen in general, because of high demand. Labourers, Truck Drivers, Machine Operators, and Production Specialists are expected to be "very easy" or "easy" to recruit.

The strategy most widely used to ensure that increased manpower requirements will be met is that of providing apprenticeship or on-the-job training to new employees. Six firms expecting difficulty recruiting are already using this method. Five firms are also taking skill inventories of present staff to see whether specific requirements can be met internally with or without on-the-job training.

2.c. Employer Concerns and Special Problems

The scarcity of all types of experienced workers is the main concern of respondents from London. One employer points out that even the public schools are beginning to close for lack of students, and he says that industry will eventually suffer from this shortage. The raiding of smaller firms by larger firms is cited by one automotive manufacturer, who complains that these large firms pay nothing for the training of the workers they get in this way. He suggests that firms should be expected to train in proportion to the size of their labour force. Another employer says that small firms can be helped by starting high school programmes to teach industrial skills and by setting up courses in grades 11 to 13 that will allow students to alternate between classroom studies and on-the-job training every four months. Still another criticizes the Industrial Training Branch for doing an inadequate job "at the employer level"; the Branch fails to provide a systematic training plan for apprentices, leaving the planning instead to the employer himself. In the opinion of this respondent, many employers merely "use" apprentices as cheap labour.

St. Thomas

1. Major Manufacturing Industries

The large Ford assembly plant located here makes the Transportation Equipment Industries the most important employers in manufacturing in St. Thomas. CM's figures suggest that as much as 50 percent of local employment in manufacturing may be concentrated in this industry group. The Machinery Industries are also important here, as are the Primary Metal and Metal Fabricating Industries.

2. Survey Results

Ten firms employing 1310 workers responded to the survey from St. Thomas. Four of these firms employ more than 100 workers each. These ten firms manufacture a wide variety of products, including furniture, plastics, fabricated metals, transportation equipment, electrical products, clay products, and machinery.

2.a. Current Shortages

Only four of the ten responding firms are experiencing shortages. These firms have nine job openings as follows: Welder (3), Operator: Screw Machine (2), Heavy Truck Driver (2), and Industrial Electrician (2). A total of thirty workers are currently employed in the shortage occupations, two of whom are expected to retire during the next five years.

2.b. Expansion Plans and Recruitment Outlook

Only one employer expects to hire additional employees during the next 12 months. This employer believes that it will be easy to hire labourers but "very difficult" to fill positions for Extracter and Blender Operators, primarily because he expects applicants to lack the requisite on-the-job experience. This employer is trying to satisfy his manpower needs in several ways, including the hiring of unskilled people whom he trains within his firm.

2.c. Employer Concerns and Special Problems

None of the employers in this area responded to the open-ended question.

Chatham

1. Major Manufacturing Industries

The Transportation Equipment Industries clearly dominate this centre. CM estimates that employment in these industries comprises almost 65 percent of local employment in manufacturing. Significant but much smaller employment is found in the Food and Beverage Industries, which account for 12.9 percent of local manufacturing employment, and the Metal Fabricating Industries, which account for 7.9 percent.

2. Survey Results

Eight firms employing a total of 822 workers responded to the survey from the Chatham area. Only two firms employ 50 or more workers. These eight firms manufacture a wide variety of products: baked goods, men's clothing, fabricated structural metals, miscellaneous machinery and equipment, and concrete products; a machine shop and a utility company also responded.

2.a. Current Shortages

Five of the eight respondents are now experiencing shortages. They are trying to fill at least 13 positions in the following occupations: Sewing Machine Operator (3), Welder: Machine Shop (1), Fabricator (1), Machinist: General (1), Siding Erector (1), and Truck Driver (4). These five firms now employ over 50 persons in the shortage occupations, and they expect that nine will retire during the next five years.

2.b. Expansion Plans and Recruitment Outlook

Four employers, three of whom are currently experiencing shortages, plan to hire more workers during the next 12 months, and all listed jobs that they expect to be "somewhat difficult" or "very difficult" to fill. Among those that will be very difficult to fill are Machinist: General, because there are no applicants, and Welders. Sewing Machine Operator, Construction Crew Foreman, Welder: General, Engineer, and Systems Analyst are expected to be "somewhat difficult" to fill, Sewing Machine Operators because applicants are thought to lack specialized skills and the ability to work at sufficient speed to meet piecework requirements, and Construction Crew Foremen because of a lack of specialized skills and on-the-job experience.

The recruitment strategy mentioned most often is that of placing newspaper ads in the help-wanted section. Three of

the employers planning to expand their firms are already placing ads, and two plan to do so in the future. Placing job orders with the CECs is the second most important strategy; three employers are already using the CECs and one plans to continue doing so in the future. The third most important strategy is that of providing apprenticeship or other on-the-job training for new employees; three employers with expansion plans are now using this strategy.

The respondents from the smallest firm, a machine shop, is considering all the possible actions to ensure that his manpower needs are met. The others are more selective. Only one of the four plans to initiate off-shore hiring.

2.c. Employer Concerns and Special Problems

The few responses to the open-ended question from Chatham are almost evenly divided between complaints about the lack of motivation among young workers and the need for more practical, on-the-job training. One employer of welders says that schools provide inadequate training in an unrealistic environment: "In school everything is nice and clean," but at work unpleasant jobs must sometimes be done and many young workers are not prepared for them. Another employer says that the CECs are slow to act and send "a poor class of men"; on-the-job training is "the only thing that helps."

Positions for sewing machine operators are especially difficult to fill. Applicants must be trained on the job because few who apply are experienced. Only one applicant in five eventually becomes a good operator.

Windsor

1. Major Manufacturing Industries

Here as in Chatham Transportation Equipment Industries are the main manufacturers. According to CM they comprise more than 56 percent of local employment in manufacturing. Much less important but still noteworthy are Metal Fabricating (especially Hardware Tool and Cutlery manufacturers) and the Food and Beverage Industries, which employ 12 percent and 9.9 percent, respectively, of local workers in manufacturing. The Chemical Industries are also significant employers in the Windsor area.

2. Survey Results

Twenty-one firms employing a total of 17,135 workers responded to the survey from Windsor, but six of these firms asked that their results remain confidential. All but six of the remaining 15 firms employ more than 50 persons each. The following industry groups are represented by these firms: Transportation Equipment, Metal Fabricating, Primary Metal, Trade, and Machinery.

2.a. Current Shortages

Only six of the 15 respondents are experiencing recruitment difficulties. They are trying to fill a total of 27 positions in the following occupations: Production Supervisor (4), Die Cast Operator (2), Moldmaker, Plastic (1), Moldmaker, Tool and Repair (1), Material Handler (1), Millwright (3), Machinist (2), Tool Maker (6), Draftsman (4), Tool and Die Maker (1), Data Processing Programmer (1), and Accountant (1). These firms employ a total of 91 persons in the shortage occupations, and nine persons are expected to retire during the next five years.

2.b. Expansion Plans and Recruitment Outlook

Six of the 15 respondents are planning to expand their firms during the next twelve months, in spite of the fact that five are already experiencing shortages. One respondent expects no problems hiring workers because he will need a Punch Press Operator, a relatively easy position to fill. The five other employers list jobs that are considered "somewhat difficult" or "very difficult" to fill. Those that will be "very difficult" to fill are Production Supervisor, Die Cast, Die Cast Machine Operator, and Tool and Mold Maker, because no applicants are expected; Millwright and Machinist, because

applicants lack specialized skills and on-the-job experience; and Production Supervisor: Moldmakers, and Tool and Moldmaker, because applicants lack specialized skills and adequate on-the-job experience beyond specialized training. One employer, experiencing some difficulty in recruiting a Material Handler, cited the "nature of the job" as the main reason.

The strategies used most widely include providing apprenticeship or other on-the-job training for new employees and advertising in the help-wanted sections of newspapers. All five of the employers who are having trouble hiring skilled workers are using these methods. One employer cites "automation" as his solution to the problem. Four others are relying on the services of the local CEC, and three are seeking manpower assistance from the Ontario Government. Almost all employers are taking an inventory of the skills of their present staff to determine if their requirements can be met internally with on-the-job training. Future recruitment strategies include in-house apprenticeship training and the use of private placement agencies. Two employers indicate that they are planning to recruit workers from overseas.

2.c. Employer Concerns and Special Problems

A large auto manufacturer reports having had trouble getting electricians, millwrights, electrical engineers, and toolmakers in the past and expects even greater difficulty in the future when other firms in his industry carry out planned expansions; shortages in many of these same occupations are also noted by another employer. A small auto parts manufacturer says that he trains his own skilled workers because government programmes are inadequate: "by the time it fills our present need levels that will likely be the time when demand will drop substantially." But another employer suggests that training programmes need to be improved, and one large firm was negotiating for a millwright's apprenticeship with the Ontario government at the time of the survey. The raiding of small firms by larger firms, a familiar theme in this study, is also mentioned.

Sarnia

1. Major Manufacturing Industries

The Chemical Industries are the major manufacturers in Sarnia. Calculations made from CM show that these industries employ over 54 percent of local workers in manufacturing. The second-largest manufacturing group here is the Petroleum and Coal Industries. CM estimates the employment in these industries to exceed 15 percent of local employment in manufacturing. Metal Fabricating and Non-Metallic Mineral Products are also important industries in Sarnia, accounting for 8.6 percent and 8.0 percent, respectively, of local manufacturing employees.

2. Survey Results

Nine firms employing a total of 5,946 workers responded to the survey from Sarnia. Two firms employ fewer than 99 workers each, two employ between 100 and 499 workers each, and five employ more than 500 workers each. The nine firms belong to the following industry groups: Primary Metals, Metal Fabricating, Non-Metallic Mineral Products, Petroleum and Coal Products, and Chemical Products. Petroleum and Chemical Products together account for more than 78 percent of the total employment reported by responding firms.

2.a. Current Shortages

Six of the nine respondents are currently experiencing a shortage of at least 36 workers in the following occupations: Accountant (4), Electrician: Industrial (4), Engineer: Chemical (10), Engineer: Electrical (3), Engineer: Industrial (1), Engineer: Research and Development (3), Mechanic: Machine (1), Millwright (4), Repair: Pattern (3), and Technologist: Electrical (3). Engineers account for 17 of the 35 positions, or almost half of these shortages. More than 63 percent of the total shortages were reported by the Chemical Products and Non-Metallic Mineral Products Industries.

The six firms reporting current hiring difficulties now employ 95 workers in the ten occupations identified, more than 80 percent as Engineers, and they expect that eight workers will retire during the next five years.

2.b. Expansion Plans and Recruitment Outlook

Two employers, both of whom are experiencing shortages, plan to hire more workers during the next twelve months, and they expect hiring for the workers they need to range from "easy" to "very difficult." Among the positions that employers in the Petroleum and Coal and Chemical Products Industries expect to be "somewhat difficult" or "very difficult" to

fill are Engineer: Chemical and Technologist: Electrical, because applicants lack both specialized skills and on-the-job experience. Positions that one employer from the Petroleum and Coal Products Industries expects to be "easy" to fill are Engineer: Chemical, Engineer: Electrical, and Engineer: Mechanical, because he is looking for new graduates without work experience.

The two respondents expecting future hiring difficulties plan to advertise in the help-wanted sections of newspapers and place job orders with private agencies. Both now advertise in the newspapers, and one plans to use a private agency in the future. Only one of these employers currently recruits from within his present work-force.

2.c. Employer Concerns and Special Problems

Most of the responses from Sarnia come from employers in the petrochemicals industries, and all are experiencing shortages in one or another skilled occupation. Maintenance people, engineers, chemists, and instrument or electrical technologists, especially those with experience, are rare; shortages of accountants, personnel specialists, and other professionals with "portable" skills are explained by a presumed preference for the urban areas of the province.

One foundry owner reports great difficulty in getting millwrights, electricians, and pattern repairmen, a problem aggravated by the stringent requirements of the current collective agreement at his firm. Another employer says that steel fitters, layout men, and welders have been in constant shortage for the past five years, and that "trial and error" is the only way of finding good workers.

Barrie

1. Major Manufacturing Industries

The Rubber and Plastics Industries are the most important local employers in this area; according to CM, they have 25 percent of the local employment in the manufacturing industries. The Electrical Products Industries are the second most important employers here, accounting for 13 percent of local employment in manufacturing. Other significant industries in Barrie are the Machinery, Metal Fabricating and Food and Beverage Industries, which have 12.8 percent, 11.3 percent, and 8 percent, respectively, of local employment in manufacturing.

2. Survey Results

Nine firms employing a total of 1,311 workers responded to the survey from Barrie. Four firms employ fewer than 99 workers each, four employ between 100 and 499 workers each, and only one firm employs more than 500 workers. The nine firms belong to the following industry groups: Electrical Products, Metal Fabricating, Machinery, Printing, and Rubber and Leather Products. The Electrical Products and Metal Fabricating Industries account for almost 88 percent of the total employment reported.

2.a. Current Shortages

Three of the nine respondents are currently facing shortages. They are trying to fill at least 19 positions in the following occupations: Assembler: General Production (6), Machinist: General (4), Operator: Screw Machine (2), Welder (2), and one position each for Clerk: Accounting, Clerk: Sales, Foreman: Production, Operator: Vacuum Forming, and Quality Control: Inspector. All of these positions are in the Electrical Products and Metal Fabricating Industries. The three firms reporting current shortages employ 130 workers in the nine shortage occupations they identified, approximately 83 percent of these workers are employed as Assemblers, Machinists, and Welders. These firms expect that during the next five years two of these workers will retire.

2.b. Expansion Plans and Recruitment Outlook

Three employers, two of whom are currently experiencing

shortages, plan to hire more workers during the next twelve months, and they expect it will be "very easy" to "very difficult" to hire them. Among the positions that employers in the Electrical Products and Metal Fabricating Industries expect to be "very difficult" to fill are Machinist and Welder, because applicants lack on-the-job experience, and Foreman: Production Supervisor, because there are no applicants at all. The position of Assembler: General Production is expected to be "somewhat difficult" to fill, because applicants lack the interest and motivation to perform the job. Positions that employers in the Electrical Products and Metal Fabricating Industries expect to be "very easy" or "easy" to fill are Labourer: Unskilled, Sprayer: Paint, and Welder: Industrial. One employer in the Electrical Products Industries does not expect any difficulty in filling openings for skilled tradesmen.

The two respondents expecting future hiring difficulties plan to recruit from within their present work-force and will sponsor apprenticeship or on-the-job training in their firms. One respondent is now using these strategies and the other plans to use them in the future. Two firms are currently advertising in newspapers, consulting an Ontario Government representative about setting up a training programme or seeking other manpower assistance, and placing job orders with CECs. Only one of these firms currently recruits overseas.

2.c. Employer Concerns and Special Problems

The low quality of job applicants and their unwillingness to make an honest effort are the outstanding concerns among the small number of respondents from Barrie. One employer reports that he has retained only two of the 22 people he has hired in the past four years; the other 20 lacked the initiative and desire to work that he considers necessary for success in his business. Here, as in other areas, some employers are also worried about the long-range effects of attrition, a problem not covered in the questionnaire. One respondent, who trains quite extensively in his firm, says that if vacancies were to open up in the screw machine area replacements would be extremely difficult to find; the length of training required for this trade makes any unplanned vacancy a very serious problem.

Northern Ontario

North Bay

1. Major Manufacturing Industries

The largest manufacturers in North Bay are the Machinery Industries which, according to CM, comprise over 26 percent of local employment in manufacturing. Two other industries are significant, each dominated by one major firm: the Clothing Industries, whose main representative in North Bay is H. D. Lee of Canada Ltd., and the Chemical Products Industries, represented by DuPont's explosives factory.

2. Survey Results

Two firms from the Electrical Products and Printing Industries in North Bay responded to the survey. The total employment in these firms is 38 workers.

2.a. Current Shortages

Both respondents are currently experiencing shortages. They are attempting to hire workers for a total of 13 additional positions: Salesman: General (4), Manager/Administrator (2), Industrial Maintenance Technician (2), Industrial Installation Technician (2), Inventory/Material Controller (1). Two positions--press operator (1) and typesetter (1)--require at least one or two years of specialized training, and the press operator position requires two years' work experience after training.

Twenty persons are now employed in these seven shortage occupations, and none are expected to retire during the next five years.

2.b. Expansion Plans and Recruitment Outlook

The one respondent expecting future hiring difficulties thinks it will be "very difficult" to fill most of the jobs noted above. He expects that there will be no applicants for Salesman: General (Industrial), Inventory/Material Controller, and Manager/Administrator, and he also cites a lack of specialized skills and on-the-job experience as problems.

This employer is taking the following actions to recruit the needed workers: advertising in newspapers, placing job orders with CECs, taking a skill inventory to determine

whether his needs can be met by on-the-job training programmes, sponsoring apprenticeship or other training for new employees, sending a company representative to recruit in schools and training institutions, and asking Ontario Government representatives for manpower assistance.

2.c. Employer Concerns and Special Problems

The only North Bay employer who responded questions the wisdom of training employees who will probably leave either during or after their training to work elsewhere.

Sudbury

1. Major Manufacturing Industries

INCO's copper and nickel refineries and their iron ore recovery plant make Primary Metal/Mining Industries the main employers here. Figures from CM and POM indicate that the Primary Metal Industries in this region employ over 10,000 workers. Also significant here are the Food and Beverage Industries and the Metal Fabricating Industries.

2. Survey Results

Five firms employing a total of 13,875 workers responded to the survey from the Sudbury area. These firms are in the Machinery, Metal Fabricating, Mining, Primary Metal, and Food and Beverage Industries. One firm employs over 13,000 persons, and one other employs more than 50.

2.a. Current Shortages

Three of the five respondents are now experiencing shortages. They are trying to fill a total of seven positions in the following occupations: Welder (3), Plateworker (2), and Operator: Milling Machine (2). These firms now employ 11 persons in these jobs, none of whom are expected to retire during the next 5 years. Each position requires 12 years of formal education and one to five years of specialized training.

2.b. Expansion Plans and Recruitment Outlook

Three of the five respondents are planning to expand their firms. They expect hiring to be "somewhat difficult" or "very difficult" for the positions of Hydraulic Mechanic, Materials Coordinator, Welder, and Plateworker. One respondent expected to hire a labourer with relative ease.

A lack of on-the-job experience is cited as the main reason for difficulty in hiring a Hydraulic Mechanic, Welder, and Material Coordinator. A lack of specialized skill is also mentioned as a reason for the anticipated difficulty in hiring a Hydraulic Mechanic.

Two of the three respondents planning to expand their

firms say they are providing apprenticeship training for new employees, and expect to continue this training. Though one respondent is not trying to recruit overseas, he expects to do so in the future.

2.c. Employer Concerns and Special Problems

One employer complains that the burden of apprenticeship training should be shared by all companies to avoid the need for recruiting overseas and to minimize the raiding of domestic firms. UIC benefits are considered too high by a second respondent, who states that because of them workers do not have to fear the prospect of being laid off.

Timmins

1. Major Manufacturing Industries

The largest employer in Timmins, according to Scott's, is the Texas Gulf Inc. Metals Division, which employs about 2,200 workers. CM says that the Food and Beverage Industries and the Printing Industries, which employ 7.75 percent and 7.6 percent, respectively, of the local labour force in manufacturing, are also significant.

2. Survey Results

Only one firm employing 15 workers in the Food and Beverage Industries responded to the survey from Timmins. This employer reports that he is not facing shortages of skilled labour and does not plan to expand his firm during the next twelve months.

Sault Ste. Marie

1. Major Manufacturing Industries

The Primary Metals Industries are the largest manufacturers in Sault Ste. Marie, and the Algoma Steel Corporation is by far its largest employer. The presence of Abitibi's ground paper and kraft products plant makes the Paper Industries important here as well. The Wood Industries are also a significant source of local employment in manufacturing.

2. Survey Results

Ten firms employing a total of 11,574 workers responded to the survey from Sault Ste. Marie. Three firms employ at least 50 workers each, and one large firm employs 10,483 workers. The responding firms represent the Primary Metal, Food and Beverage, Construction, Printing, Wood, Metal Fabricating, and Furniture Industries.

2.a. Current Shortages

Six of the 10 respondents are currently trying to fill a total of 50 positions. Two large firms alone are trying to fill 43 positions: Pipefitter (5), Machinist (7), Ironworker (8), Welder (7), Wireman (6), Rigger (4), Maintenance Mechanic (2), Electrician (1), Air Conditioning Repair (1), Patternmaker (1), and Instrument Repair (1). These firms now employ 900 persons in these jobs, and they expect 68 to retire during the next five years. All of these positions require at least 12 years of formal education, three years of specialized skill training, and two years of on-the-job experience beyond specialized training.

The remaining four firms are attempting to fill a total of 7 positions: Sheetmetal Apprentice (1), Foreman (1), Machinist: General (1), Printing Layout Artist (1), Advertising Sales (Printing Industries) (1), and Compositor (2). Almost all of these positions require at least 10 years of formal schooling, some require four years of training, and most require at least two years of on-the-job experience beyond specialized training. Eleven workers are now employed in these jobs, and two are expected to retire during the next five years.

2.b. Expansion Plans and Recruitment Outlook

Eight employers plan to hire additional workers during the next twelve months, and almost all expect the necessary tradesmen to be "somewhat difficult" or "very difficult" to

find. In the two large firms in Sault Ste. Marie Patternmaker, Molder, and Air Conditioning Repairman are positions that are expected to be "very difficult" to find, all because there will be no applicants. Those "somewhat difficult" to fill are Rigger, Machinist: Lathe, Ironworker, Boilermaker, Electrician, and Machinist: General, because there are no applicants; Welder, Instrument Repair, and Wireman, because of a lack of specialized skills; and Pipefitter and Maintenance Mechanic, because of a lack of on-the-job experience. One position, Bricklayer, is considered "easy" to fill.

Among the remaining employers with expansion plans the following positions are considered "very difficult" to fill: Foreman and Machinist, because there are no applicants for these jobs, and Advertising Sales and Layout Artist (Printing Industries), because of a lack of specialized skills and insufficient on-the-job experience. Sprayer (Wood) is considered to be a position that is "somewhat difficult" to fill.

The recruitment strategy mentioned most often by all 10 employers is that of providing apprenticeship or other on-the-job training for new employees. Placing advertisements in newspapers and placing orders with CECs are also considered important strategies, and employers are now using these methods to recruit workers. Other methods in use here include sending company representatives to schools and training institutions and consulting an Ontario Government representative or seeking manpower assistance.

2.c. Employer Concerns and Special Problems

The poor attitudes of most potential employees, even during interviews, is one of the main concerns among respondents from this area. One employer comments that workers want to do very little work and expect to receive a lot in return. Another says that he is seeking help from the local Industrial Training Council to eliminate a shortage of machinists.

Thunder Bay

1. Major Manufacturing Industries

The Paper Industries are the major employers in the Thunder Bay area, having more than 47 percent of local employment in manufacturing, according to CM. Scott's and POM report that the two largest firms in the Paper Industries are the Great Lakes Paper Company Limited, which has about 3,600 employees, and the Abitibi Forest Products (Paper Company) Limited, which has more than 1,600 employees. The Transportation Equipment Industries are significant here as well, because Hawker-Siddeley Canada Limited has its large Canadian Car Division here. According to CM, the Food and Beverage Industries employ 8.7 percent of the local labour force in manufacturing and the Wood Industries employ 9.8 percent of the labour force.

2. Survey Results

Seven firms employing a total of 321 workers responded to the survey from Thunder Bay. Two firms each employ more than 50 workers. The responses came from firms in the following industries: Trade, Metal Fabricating, Wood, Printing, and Food and Beverage.

2.a. Current Shortages

Five of the seven respondents are experiencing shortages. They are trying to fill at least nine positions with the following occupations: Layout: Fitter (2), Welder: Fitter (2), Welder: Pressure (1), Quality Control Inspector (1), Mechanic, Class "A" (1), Printer: Industrial (1), and Sprayer: Paint (1). These firms employ at least 14 persons in these occupations, and none are expected to retire during the next five years. Most positions require at least 10 years of formal schooling, between one and five years of specialized training, and between one and five years of on-the-job experience beyond specialized training.

2.b. Expansion Plans and Recruitment Outlook

Three respondents, all experiencing current shortages, plan to hire more workers to accommodate expansions of their firms during the next twelve months. All of the positions in question are expected to be either "somewhat difficult" or "very difficult" to fill. Those considered "somewhat diffi-

cult" to fill are Machinist: General, Mechanic: Class "A", Assembler: Fitter, Welder: Fitter, Welder: Industrial, and Printer: Industrial. Those considered "very difficult" to fill include Layout Welder, Quality Control Inspector, and Sprayer: Paint.

The recruitment strategies most often mentioned include sponsoring apprenticeship or other on-the-job training for new employees, placing advertisements in the help-wanted sections of newspapers, and placing job orders with CECs. Two of the four respondents hoping to expand are already sponsoring apprenticeship programmes, three are placing orders with CECs, and two are thinking of sending company representatives to firms and schools in the future. None of the respondents are hiring in foreign countries, nor do they intend to do so in the future.

2.c. Employer Concerns and Special Problems

One small shop owner complains that the presence of two unions, each of which restricts the types of work done by its members, is extremely inefficient. Another respondent says that government regulations have hampered the progress of his company. A third employer, who says that the effort to do a good job is more important in an employee than skills, reports that a poor attitude and a lack of interest in work are the main problems he faces.

CHAPTER IV

SKILL REQUIREMENTS AND RECRUITMENT PLANS BY COLLEGE AREAS

Algonquin College Area

1. Survey Results

Ottawa is the only major centre served by Algonquin College. The 29 respondents from this college area employ a total of 2,479 workers, 62 percent of whom work in Ottawa. Sixteen of these firms employ fewer than 100 workers. The respondent firms represent a number of industries: Printing and Publishing; Food, Beverage and Tobacco; Rubber and Leather; Textile and Clothing; Primary Metals; Metal Fabricating; Electrical Products; and Chemical Products.

2. Current Shortages

Seventeen of the 29 respondents are currently having difficulties filling a total of 60 positions in the following occupations: Engineer and Technologist (9), Machinist (various skills) (7), Operator, including Sewing Machine Operator (10), Electronic Assembler (1), Tool-and-Die Maker (3), Computer Personnel (1), Technical Writer (1), Lithographic Stripper (1), Sales (5), Artists (1), Manager (various) (4), Millwright (1), Labourer: Unskilled and Semi-Skilled (5), Steamfitters (1), Mechanic: Industrial (1), and nine other positions. The 17 firms now employ 153 people in the shortage occupations and at least six are expected to retire during the next five years.

It is noteworthy that a shortage of Engineers and Technologists is reported only in Ottawa, while that of various kinds of Managers is reported in the smaller communities in this college area.

3. Expansion Plans and Recruitment Outlook

Eleven of the 29 respondents are planning to expand their firms during the next twelve months. A majority of these firms are in Ottawa, where most of the expected recruitment difficulties are reported. Most employers are already taking a wide variety of actions to ensure that their manpower requirements will be met, such as taking skill inventories of present staff to see if requirements can be met internally.

with or without training, providing apprenticeship or on-the-job training for new employees, or advertising in newspapers.

4. Employer Concerns and Special Problems

The education system is graduating workers who lack basic math and the specialized skills that are needed, according to respondents from this area. High school training should include general courses in machinery and related industrial subjects, and more cooperation between industry and the school system is needed. Several respondents complain of a poor work ethic; young people are "not motivated for skill and production in the classroom or home," according to one respondent.

A shortage of tool-and-die makers is reported in Perth and Smiths Falls, and a feed-grain manufacturer in Renfrew says that the training of managers and skilled foremen is a source of concern. In Ottawa itself respondents cite electronic assemblers, engineers, designers, computer programmers, and garment workers as tradesmen who are difficult to find.

St. Lawrence College Area

1. Survey Results

St. Lawrence College, located in Brockville, serves the major centres of Kingston and Cornwall. In all 28 responses were received from this area; 20 of these came from firms outside the major centres, including Brockville itself, Gananoque, Morrisburg, and Prescott. These 28 firms employ a total of 4,811 workers, 3,019 of whom are employed outside Kingston and Cornwall.

The responding firms are mainly small: 16 firms employ fewer than 100 workers each, eight employ between 100 and 499 workers each, and only four employ more than 500 workers each. The manufacturing industries they represent are principally Metal Fabricating, Electrical Products, Chemical Products, and Textiles and Clothing; responses were also received from firms in the Food, Beverages and Tobacco, Machinery, Non-Metallic Mineral Products, Transportation Equipment, Primary Metals, and Wood Industries.

2. Current Shortages

Nine respondents from this college area are having difficulty filling a total of 34 positions for skilled workers in the following occupations: Labourer: Unskilled (5), Sign: Installer, Painter, Maker (5), Machinist: General (4), Tool-and-Die Maker (4), Operator: Other (4), Operator: Header (3), Engineer: Mechanical (2), and one position each for Engineer: Research and Development; Fabricator: Sheet Metal; Foreman: Production Supervisor; Mechanic: Machine/Engine; Sprayer: Paint; Technogist: Industrial; and Welder: Industrial. A total of 94 workers are now employed in these jobs in the firms reporting shortages, and four of these are expected to retire in the next five years.

3. Expansion Plans and Recuitment Outlook

Fifteen respondents are planning to expand their firms during the next year, including six who are already experiencing difficulty finding the workers they need, and all but two expect further trouble filling the new jobs that their expansion plans will create. Jobs that two or more employers in this area think will be "very difficult" or "somewhat difficult" to fill are Machinist: General; Millwright: Industrial; Sign: Installer, Painter, and Maker; and Welder: Industrial. Other positions expected to be "very difficult" or "somewhat difficult" to fill, each named by only one employer,

are Cutter: Material; Engineer: Electrical and Electronic; Layout Draftsman; Maintenance: Electrical; Maker: Cabinet and Tool; Mechanic: Heavy Equipment and Maintenance; Special Professions: Safety; Technologist: Industrial; Accountant; Analyst: Systems; Electrician: Wirer; Fabricator: Sheet Metal; Labourer: Semi-Skilled; Maker: Tool Jig; Operator: Knitting/Sewing and Other; Planner: Production; and Sprayer: Paint. A lack of specialized skills is the reason cited most often for these difficulties. This problem is mentioned in connection with Accountant; Fabricator: Sheet Metal; Machinist: General; Maintenance: Electrical; Mechanic: Heavy Equipment; Millwright: Industrial; and Operator: Other. Equally important is a lack of on-the-job experience, which is cited as a problem in finding Sign: Installer, Painter, and Maker; Analyst: Systems; Engineer: Electrical; Layout Draftsman; and Machinist: General. Some employers also expect that no one will apply for certain positions, in particular Cutter: Material, Electrician: Wirer; and Welder: Industrial. The following jobs are expected to be "easy" or "very easy" to fill: Assembly: General Production; Labourer: Unskilled; Operator: N.C. Machine; Salesman: General; and Technician: Industrial.

Employers in this area clearly favour certain strategies for recruiting the workers their expansion plans will require. Most popular is the taking of a skill inventory of present employees to determine if their skill needs can be met either with or without further training. Equally important is the placing of job orders with CECs, a strategy that employers plan to continue in the future. Some employers are also seeking the assistance of an Ontario Government representative in setting up training courses. Others are carrying out apprenticeship or other on-the-job training in their firms as well as advertising in newspapers. Less common is recruiting overseas and in the U.S. for qualified tradesmen.

4. Employer Concerns and Special Problems

Location is perceived as a problem by some employers here, even in Kingston, its largest centre, where a wire and cable manufacturer says that the "right type" of professional accountants, engineers, and first-line managers are difficult to hire. Some local employers also criticize the training available in the high schools and technical schools, which are thought to place too much emphasis on academic training and too little on practical skills. A particularly serious problem is turnover, which is caused both by the tendency of workers to go elsewhere for higher-paying jobs once they are retrained and by the ease of getting UIC benefits. One respondent believes that the skilled trades now command salaries that are unreasonable.

Electricians, welders, and pipe-fitters are difficult to hire, according to one respondent from Cornwall; machine operators and diesel mechanics are "desperately" needed in Kingston; a Brockville employer says that "there are no machinists in this country," and a sheet metal products manufacturer from the same city reports that he has closed his tool-and-die department "because of frustration in finding tool-makers" during the past five years. A producer of synthetic detergents who appears to be having little difficulty says that he usually hires workers in entry-level jobs and promotes them from within the firm.

Sir Sanford Fleming College Area

1. Survey Results

Peterborough is the only major centre served by Sir Sanford Fleming College. The 18 respondents from this college area employ a total of 6,529 workers, 88 percent of whom work in Peterborough itself. Nine firms employ fewer than 99 workers each, eight firms employ between 100 and 499 workers each, and only one firm employs more than 500 workers. These 18 firms belong to the following industry groups: Metal Fabricating, Electrical Products, Wood and Paper Products, Machinery, Non-Metallic Mineral Products, Furniture and Fixtures, Rubber and Leather Products, and Miscellaneous Manufacturing. The Metal Fabricating and Electrical Products Industries account for almost three-quarters of the total employment reported.

2. Current Shortages

Eight of the 18 respondents are currently having difficulty filling a total of 50 positions in the following occupations: Machinist: General (9), Tool-and-Die Maker (9), Machine Operator (7), Electrician (6), Millwright (4), Technician (4), Welder: Fitter (4), Draftsman (2), Mechanic: Maintenance (2), Operator: Tube Mill (2), and Sprayer: Paint (1). These eight firms now employ 499 workers in these occupations and expect at least 38 to retire during the next five years.

3. Expansion Plans and Recruitment Outlook

Twelve employers, six of whom are already experiencing shortages, plan to hire more workers during the next twelve months, and they expect hiring for the positions they need to fill to range from "easy" to "very difficult." Among the positions that employers expect to be "very difficult" to fill are Draftsman, Machinist: General, Operator, Millwright, Tool-and Die-Maker, Welder, and Welder: Fitter, because applicants lack either the skills or the combination of skills and experience necessary for these jobs. Positions that employers expect to be "somewhat difficult" to fill include Welder: Helper, Foreman: Production, Mechanic, Electrician, and Technician, because applicants lack either specialized skills or on-the-job training or both. The position of Apprentice: Cabinet Maker is also expected to be "somewhat difficult" to fill, because applicants lack academic skills in addition to on-the-job experience. One employer expects Labourer: Unskilled to be a "somewhat difficult" position to fill because of the

nature of the job and the resulting high turnover. Positions that employers expect to be "easy" to fill are Metal Finisher, Assembler: General Production, and Salesman.

In order to ensure that their increased manpower requirements will be met employers intend to use a variety of means, the most common of which are advertisements in newspapers, skill inventories of their work force, consulting an Ontario Government representative about training courses, sponsoring apprenticeship or on-the-job training or both, and placing job orders with the CECs. Recruitment strategies that employers use less frequently include sending company representatives to recruit in schools and training institutions, placing job orders with private agencies, and recruiting in the United States or overseas.

4. Employer Concerns and Special Problems

Machinist, tool-and-die maker, plastic mould maker, and experienced engineer are mentioned as occupations in which there are local shortages of particular concern. An employer from Cobourg says that he has excellent relations with the local Manpower office and has no trouble getting general labourers, but that it is difficult to get skilled workers because they are just not available. Another employer reports that he has been searching for an experienced machinist for eight months and still has had no luck.

Competition with larger centres for skilled workers is also a problem. One Cobourg employer complains that he is unable to retain good maintenance people because he cannot offer the high wages available in the auto industry in Oshawa. He suggests a more aggressive apprenticeship training programme and the establishment of a community "pool" of maintenance workers.

A third problem here is that of finding workers with the right basic skills and work attitudes. An employer from Lindsay asserts that labourers are concerned only with qualifying for UIC; turnover is therefore high in his firm, though the skills needed for his business can be learned quickly. An employer in Hastings says that he hires mainly grade 12 graduates, but that three-quarters of them are incompetent in basic math and spelling, have poor memories, and lack discipline.

Loyalist College Area

1. Survey Results

Belleville is the only major centre served by Loyalist College. The 14 respondents from this college area employ a total of 2,417 workers, 89 percent of whom work in Belleville itself. Eight firms have fewer than 100 employees each, five have between 100 and 499 each, and one employs over 500 workers. These firms represent a wide variety of industries, including Machinery, Metal Fabricating, Non-Metallic Mineral Products, Chemical Products, Electrical Products, Paper, Textiles and Clothing, Food, Beverage, and Tobacco, and Rubber and Leather.

2. Current Shortages

Seven of the 14 respondents are currently having difficulty filling a total of 46 positions in the following occupations: Engineer (11), Packer (10), Welder (7), Grinder (7), Moulder (4), Inspector: Quality Control (4), Machinist (2), and Steel-Fabrication Layout (1). These seven firms now employ 165 workers in these jobs and expect at least 10 to retire during the next five years.

3. Expansion Plans and Recruitment Outlook

Nine respondents are planning to expand their firms during the next twelve months. Surprisingly, the one respondent from outside Belleville who plans to expand expects it to be "easy" to fill the positions he will have for Seamstress and Operator: Knitting/Sewing. Three respondents in Belleville expect it to be "very difficult" or "somewhat difficult" to get Engineers, Moulders, and Grinders.

In order to fill these positions employers intend to use a variety of means: advertisements in newspapers, skill inventories of their work-force, consulting an Ontario Government representative about training courses, and placing job orders with the CECs.

4. Employer Concerns and Special Problems

Though millwrights and accountants were not reported as shortage occupations, respondents from this area feel that millwrights, machinists, and accountants are hard to find here. Accountants are thought by one respondent to prefer the larger cities. One vegetable-processor from Picton complains

of the increasing difficulty of getting proper seasonal help. Another employer from Marmora demands that UIC benefits be reviewed: "we have 1 million unemployed and we can't find unskilled workers for \$200 a week." One apparently satisfied respondent from Deseronto says, "We appreciate the Canada Manpower Training Programme," which enables his firm to hire and train native peoples.

Durham College Area

1. Survey Results

Durham College serves the major centres of Oshawa/Whitby and Pickering. The 29 respondents from the college area employ a total of 2,728 workers, 63 percent of whom work in the major centres. Twenty-one firms employ fewer than 99 workers each, seven firms employ between 100 and 499 workers each, and only one firm employs more than 500 workers. The 29 respondents belong to the following industry groups: Rubber and Leather Products, Textiles and Clothing, Wood Products, Paper and Allied, Printing, Primary Metals, Metal Fabricating, Machinery, Transportation Equipment, Electrical Products, Non-Metallic Mineral Products, Chemical Products, and Miscellaneous Manufacturing. More than one-quarter of the respondents belong to the Metal Fabricating Industries.

2. Current Shortages

Twelve of the 29 respondents are currently having difficulty filling a total of 55 positions in the following job occupations: Assembler: Machine (4), Clerk: Sales/Shipping (1), Engineer: Industrial (1), Fabricator: Sheet Metal (3), Foreman: Production Supervisor (2), Labourer: Unskilled (1), Labourer: Semi-Skilled (2), Layout: Fitter (3), Machinist: General (6), Machine: Maintenance (2), Operator: Equipment (2), Operator: N.C. Machine (3), Operator: Press (2), Operator: Tripper (4), Operator: Other (14), Tool-and-Die Maker (3), Welder: Industrial (1), and Welder: Fitter (1). Operators and Machinists account for 31 of the 55 positions, or more than 56 percent of these shortages. More than half of the total shortages were reported by the Metal Fabricating Industries. The 12 firms reporting current hiring difficulties now employ 245 workers in the 18 shortage occupations identified; of these more than 68 percent are employed as Operators, and they expect that 27 workers will retire during the next five years.

3. Expansion Plans and Recruitment Outlook

Fifteen employers, seven of whom are currently experiencing shortages, plan to hire more workers during the next twelve months, and they expect that hiring for the positions they need to fill will range from "easy" to "very difficult." Among the positions that employers expect to be "somewhat difficult" or "very difficult" to fill are Analyst: Marketing, Assembler: Machine, Clerk: General, Cutter: General, Draftsman, Wood Finisher, Foreman: Production Supervisor, Labourer: Semi-Skilled, Layout: Fitter, Machinist: General, Maintenance: General, Manager: Administration, Operator: Mould, Operator:

N.C. Machine, Operator: Reactor, Operator: Thread Roll, Operators: Other, Salesman, and Welder, all because applicants lack the specialized skills or on-the-job experience needed to perform these jobs. Clerk: Sales/Shipping and Cabinet Maker will be difficult to fill because applicants lack the necessary academic skills. Employers expect it will be "very difficult" to fill positions for Assembler: Fitter, Engineer: Research and Development, Mechanic: Maintenance, and Operator: Press, because no one will apply for these jobs. Among the positions employers expect to be "easy" to fill are Accountant, Assembler: General Production, Body Builder, Inventory: Material Control, and Labourer: Unskilled. Only one of the 15 employers planning expansion does not expect any future recruitment difficulties.

The recruitment strategies mentioned most often by the 14 firms expecting future hiring difficulties are sponsoring apprenticeship or on-the-job training for new employees, taking skill inventories of their present work-force, advertising in newspapers, and placing job orders with CECs. Six employers plan both to recruit in schools and training institutions and to consult an Ontario Government representative about setting up training courses. Two firms are already using these strategies and four plan to do so in the future. Five employers expect to recruit overseas and in the United States but only one intends to place job orders with a private agency.

4. Employer Concerns and Special Problems

The prevalence of poor attitudes among young workers is the concern cited most frequently by employers in this area. A respondent from Ajax says that he wants people who care about what they are doing, and another from Port Hope is concerned because he believes that high welfare and UIC benefits have eliminated the incentive to work.

The training received in technical schools is also thought by some to be inadequate. Though one employer in Pickering says he is happy to cooperate with Durham College in training machinists and mechanics, two others in the same city think that existing programmes for training workers fail to produce the needed skills. One respondent says this problem will not be solved unless Ontario creates an apprenticeship programme like those in Europe.

Toronto College Area:
Seneca, Humber, Centennial, and George Brown
Community Colleges

1. Survey Results

Four colleges serve Metropolitan Toronto, which is defined as the City of Toronto and its five Boroughs. These colleges also serve the nearby communities of Woodbridge, Aurora, Newmarket, Richmond Hill, Markham, Unionville, Thornhill, and the surrounding rural areas.

A total of 418 employers from this area responded to the survey, 88 percent of them from Metropolitan Toronto. Twenty-nine percent of the responding firms have fewer than 20 employees each; 25 percent have between 20 and 49 employees each; 14 percent have between 50 and 99 employees each; 26 percent have between 100 and 499 each; and 5 percent have more than 500 employees. The total employment for all these firms is 49,590.

All industries are represented by the respondents from the wide area served by the four colleges. Almost 20 percent of the employers are in Metal Fabricating where smaller-sized firms predominate. Ten percent of the responses are from the Electrical Products, and 8 percent from the Machinery Industries. The other respondents are primarily from Food, Beverage and Tobacco, Textiles and Clothing, Wood Products and Furniture, Paper and Allied, Printing and Publishing, Primary Metals, Transportation Equipment, Non-Metallic Minerals, Petroleum and Coal Products, and Chemical Products Industries.

2. Current Shortages

Fifty-two percent of the responding employers from this area are currently having difficulty filling a total of 1,136 positions. Shortages of industrial skills dominate the long and varied listing of jobs with current shortages. Eleven percent of the current openings are for Machinists (125), required primarily by the Metal Fabricating and Machinery Industries and to a less degree by the Transportation Equipment, Electrical Products, Miscellaneous Manufacturing, and Primary Metals Industries.

Another 11 percent of the current openings are for various Machine Operators (126). Among the more frequently cited openings for Machine Operators are Boring-Mill, Press/Brake/Punch, Screw Machine, Milling Machine, Thread Roll, Lathe - all types, Header, Mould, and Drill. Openings for these types of skills account for 82 percent of all the

Machine Operator openings and are primarily required in the Metal Fabricating and Machinery Industries. Also high on the list of shortage occupations for the industrial trades are Tool-and-Die Makers (63), Cabinet Makers (49), Welder-Fitters (27), Electricians (27), and Skilled Assemblers (63). There are 26 openings for Foreman and Assembler: Lead Hand and 49 for Sewing Machine Operators. Employers also find it difficult to fill the 87 positions for Production Assembly and Labourer: Skilled and Semi-Skilled positions.

The most noticeable "professional" positions that are difficult to fill are for Engineer: Industrial (15) and Engineer: Electrical (24). Industrial Engineers are currently required by the Chemical and Chemical Products Industries and Electrical Engineers by the Machinery Industries.

Total current employment in the positions with current recruitment difficulties is 3,465, and 177 are expected to retire in the next five years.

3. Expansion Plans and Recruitment Outlook

Fifty-five percent of the respondents are planning to expand their firms during the next twelve months. Since the majority of the firms are from Metropolitan Toronto their future requirements and recruitment outlook predominate (for details please see the results for Toronto on pages 58 to 60). The specific requirements and outlook for employers in the other communities parallel those of Toronto employers. Nine out of every ten employers in this college area expect recruitment difficulties.

4. Employer Concerns and Special Problems

The discussion of employer concerns in Metropolitan Toronto (see page 60 to 61) outlines most of the major issues raised by employers in the area served collectively by these four colleges. A sampling of the comments from employers in the centres just outside Toronto will help to place these issues in perspective.

Several respondents from Markham complain of "UIC free loading" and the desire among workers for immediate reward rather than long-term training; a Weston manufacturer agrees and asks: "is anything being done?" The "denigration of skilled trades" is responsible for this attitude, in the view of one Markham employer. Two respondents from Rexdale also call for "better recognition" of the trades, while others suggest a closer link between the trade schools and small

businesses. An employer in Aurora says that "personnel searches of several months duration often produce no more than one marginally qualified applicant," and points out that "their competence directly determines our level of production." A Thornhill employer says that Ontario should have "at least ten" Industrial Resource Centres like the one at Humber. A baked-goods manufacturer in West Toronto reports that bakers with real skill are hard to find; there are "no skilled bakers being graduated from George Brown--only diletantes!" According to this respondent, Canada Manpower encourages only "misfits" who "can't hack school" to learn this trade. An employer in Weston says that "Canadian training of highly skilled workers is totally inadequate," and states that the problem will not be solved as long as the good students are trained for non-existent jobs and the less intelligent students are trained for the trades.

Sheridan College Area

1. Survey Results

Sheridan College serves the major centres of Mississauga, Oakville, Brampton and Burlington. A total of 136 firms from this area employing 15,764 workers responded to the survey. Seventy-three of these firms employ fewer than 50 people each, 28 employ between 50 and 99 each, 29 employ between 100 and 499 each, and six employ over 500 each.

The industries that are best represented in the survey returns are Metal Fabricating, Machinery, Chemical Products, Electrical Products, and Transportation Equipment. All of the remaining manufacturing industries except Primary Industries and Rubber and Plastics Products are also represented, though in smaller numbers.

2. Current Shortages

Seventy-seven respondents from this area are having trouble filling a total of 404 jobs in 87 different occupations. The most serious shortages are in the following jobs: Machinist: General (39), Labourer: Semi-Skilled (30), Welder: Industrial (25), Analyst: Systems (17), Maker: Tool (16), Operator: Dyehouse (15), Operator: Lathe (12), Assembler-Fitter: Machine/Machine Tool (9), Fabricator: General (8), Finisher: Metal/Anodizer (8), Mechanic: Maintenance (8), Salesman: General (8), Assembler-Fitter: Equipment (7), Tool-and-Die Maker (7), Finisher: General (6), Labourer: Unskilled (6), and Operator: Casting (6). These 17 occupations account for a total of 227 of the 404 jobs available. Shortages are also noted for various kinds of Machine Operators (35), Assemblers (12), Labourers (10), Maintenance Workers (9), Mechanics (8), Clerks (5), Computer Personnel (5), Draftsmen (5), Salesmen (5), and smaller numbers of Welders, Assembler-Fitters, Electricians, Technicians, and various other jobs.

The 77 firms reporting shortages now employ a total of 1,132 persons in these same jobs, 42 of whom are expected to retire during the next five years.

3. Expansion Plans and Recruitment Outlook

More than half of the respondents from this area are planning to expand their firms within the next twelve months, including at least 50 that are already facing shortages of skilled workers. All but a few respondents expect to encounter further difficulty filling the new jobs, their expansion

plans will create. Some trades are thought to be subject to widespread shortages. Large numbers of employers report that they expect the following jobs to be difficult to fill: Machinist: General (16 employers), Salesman: Customer Service (11), Welder: Industrial (9), Manager: Administrator (7), Assembler: General Production (5) and Lead Hand (5), Labourer: Skilled (5), Operator: Other (5), Salesman: General (5), Finisher: General (4), Foreman: Production Supervisor (4), Operator: Lathe (4), and Press, Brake and Punch (4), and Technician: Industrial (4). Recruiting is also expected to be "somewhat difficult" or "very difficult" for at least 74 other jobs, including various types of Assembler, Computer Personnel, Draftsman and Drafter, Electrician, Engineer, Estimator, Fabricator, Grinder, Heat Treater, Inventory Control Worker, Labourer, Layout Man, Maintenance People, Cabinet and Tool Maker, Machine Operator of various kinds, Production Planner, Printer, Quality Control Inspector, Repairer, Scientist, Secretary, Solderer, Paint Sprayer, Technicians, Welder, and Technical Writer. In a large number of cases employers believe that these positions will be difficult to fill either because there will be no applicants for these jobs or because applicants will lack the combination of specialized skills and on-the-job experience necessary to do them properly.

Recruiting is expected to be "easy" or "very easy" for a few jobs, including Accountant; Analyst: Production; Clerk: Accounting, General, and Clerk-Typist; Layout Draftsman; Operator: Extruder; and Operator: Reeling.

4. Employer Concerns and Special Problems

The main concerns in this college region are the decline of the work ethic, high absenteeism and turnover, and the notion that "the good life" can be attained without much effort. An employer in Georgetown complains that "incentive for a person to improve himself appears to be a thing of the past." The easy availability of UIC benefits aggravates this problem, which one respondent thinks can be solved by making benefits contingent upon accepting training in the trades.

The other major concern here is the shortage of high-quality training programmes. One respondent advocates a national apprenticeship training programme, and another thinks that a three-year general certificate course should be established to prepare its graduates to be trained to employers' specific needs in less than a year. Another respondent says that training programmes need to be updated and schools better equipped. A few employers report that they are participating in PITAC (Peel Industrial Training and Advisory Committee), which they find effective.

The CECs are doing a poor job of screening applicants, in the opinion of several respondents. One says that "we have exhausted all avenues in trying to acquire skilled labour"; he advises the government to curtail its LIP services and "take action." Others think more public relations support should be given to the trades to encourage young people to enter them.

Shortages of machinists, welders, set-up men, and mechanics of various kinds are noted by employers throughout the region.

Mohawk College Area

1. Survey Results

Mohawk College serves the major centres of Hamilton and Brantford. The 69 respondents from this college area employ a total of 21,621 workers. Eighty-three percent of these employees work in Hamilton alone, and more than 90 percent work in the two major centres combined. Forty-nine firms employ fewer than 99 workers each, 12 employ between 100 and 499 workers each, and eight employ more than 500 workers each. These firms represent a wide variety of industries, including Food, Beverage and Tobacco, Primary Industries, Rubber and Leather, Textiles and Clothing, Wood Products, Paper and Allied, Printing, Primary Metals, Petroleum and Coal Products, Chemical Products and Miscellaneous Manufacturing. More than half the respondents belong to the Metal Fabricating, Chemical Products, Miscellaneous Manufacturing, and Machinery Industries.

2. Current Shortages

Twenty-nine of the 69 respondents are currently experiencing difficulty in filling a total of 152 positions in the following occupations: Analyst: Production (2), Apprentice (2), Assembler: Electronic (2), Assembler: Lead Hand (4), Assembler: Fitter (13), Computer Personnel (2), Designer: Textile (1), Electrician (1), Engineer (5), Foreman: Production Supervisor (1), Grinder (1), Installer: General Production (2), Inventory: Material Control (2), Labourer: Semi-Skilled (5), Layout: General (2), Machinist: General (34), Machine Tool Setter (2), Maintenance: General (2), Cabinet Maker (4), Mould Maker (2), Manager: Administration (1), Mechanic: Maintenance (1), Millwright (4), Operator: Drill (3), Operator: Equipment (2), Operator: Frame Machine (2), Operator: Burner (1), Operator: Coiler (2), Operator: Drill (3), Operator: Sewing (8), Operator: Lathe (10), Operator: N.C. Machine (3), Operator: Press (6), Operator: Shear (2), Operator: Other (3), Pipefitter (3), Quality Control: Inspector (1), Technician: Industrial (1), Tool Maker (1), Tool-and-Die Maker (1), Welder (2), and Welder: Fitter (3). Machinists and Operators account for 77 of the 152 positions, or just over half of the shortages. Three-quarters of the total shortages were reported by firms in the Primary Metals, Metal Fabricating, and Machinery Industries. The 29 employers reporting current hiring difficulties now employ 779 workers in the 42 shortage occupations. More than 50 percent of these workers are employed as Assembler: Fitter, Labourer: Semi-Skilled, Machinist: General, Operator: Boring Mill, and Operator: Sewing. These firms expect that 57 workers will retire from these jobs

during the next five years.

3. Expansion Plans and Recruitment Outlook

Thirty-three employers, 16 of whom are experiencing shortages, plan to hire more workers during the next twelve months, and they expect hiring for the positions they need to fill to range from "very easy" to "very difficult." Among the positions that employers expect to be "somewhat difficult" or "very difficult" to fill are Assembler: Electronic, Assembler: Lead Hand, Assembler: Fitter, Baker, Chemist, Cutter: Material, Computer Personnel, Draftsman, Drafter: Designer, Foreman: Production Supervisor, Installer: General, Labourer: Skilled, Labourer: Unskilled, Layout: General, Machinist: General, Cabinet Maker, Mould Maker, Manager: Administration, Mechanic: General, Millwright, Operator: Press, Operator: Coating-Plating, Operator: Sewing, Operator: Burner, Salesman, Technologist: Industrial, and Welder: Fitter, all because applicants lack either the specialized skills or the on-the-job experience needed to perform the job. Also expected to be difficult positions to fill are Technician: Electronic, because applicants lack the necessary academic skills, and Analyst: Production, Assembler: General, Installer: General, Inventory: Material Control, Maintenance: Machine, Operator: Coiler, Operator: Lathe, Operator: Reactor and Operator: Saw, because no one is expected to apply. Employers expect positions for Analyst: Marketing, Baker: Helper, Clerk: General, Operator: Cutter, Operator: Flaker and Operator: Ram Straightener to be "easy" to fill. Six of the firms planning expansion do not foresee any recruitment difficulties.

The 27 employers expecting future hiring difficulties intend to use a variety of means to ensure that their manpower requirements will be met, the most common of which are advertising in newspapers, taking skill inventories of their workforce, sponsoring apprenticeship or on-the-job training, and placing job orders with CECs. Recruiting in schools and training institutions, consulting an Ontario Government representative about training courses, and placing orders with private agencies are the second-most-important strategies mentioned by employers. Eight of the 27 employers plan to recruit in the U.S. and overseas.

4. Employer Concerns and Special Problems

Opinions differ here on the value of local training programmes. At least two respondents think Mohawk College is turning out high-quality graduates, but another is not satisfied with the results from community college training pro-

grammes which in his view do not provide the specialized skills necessary. Many employers in this area are training their own workers, some by choice but many out of necessity, because trained, experienced people are unavailable. Two employers in Brantford advocate a "return to the apprenticeship system on a wide scale" to correct these problems. One reports that the training courses sponsored by Ontario and by the Ontario Ministry of Agriculture and Food are a good but expensive way of getting skilled labourers.

Here as elsewhere smaller companies find it difficult to compete with larger, higher-paying firms, which do not accept their share of the training burden. A small manufacturer in Grimsby reports that this problem is compounded by an expectation of high starting wages among young people; much of his basic repair work must be contracted out because he cannot find the necessary labour, a procedure that makes it difficult to schedule production.

Niagara College Area

1. Survey Results

Niagara College serves the major centres of St. Catharines, Niagara Falls, and Welland. A total of 40 firms responded to the survey from this area, but two firms asked that their data remain confidential. The 38 respondent firms whose data could be included in this report employ a total of 7,839 workers.

Most responding firms are relatively small. Twenty-one responses were received from firms employing fewer than 100 workers each, 13 from firms employing between 100 and 499 workers each, and four from firms employing 500 or more workers. The respondents represent the Metal Fabricating, Chemical Products, Transportation Equipment, Food and Beverage, Non-Metallic Mineral Products, Machinery, Electrical Products, Primary Metals, Wood Products, Construction, Textile and Clothing, and Furniture and Fixtures Industries.

2. Current Shortages

Eighteen of the 38 responding firms are facing current shortages of skilled tradesmen. They are trying to fill a total of 91 positions in the following occupations: Machinist: General (32), Chemical Worker (4), Mechanic (3), Assembler-Fitter and Layout Person (4), Electrician (7), Operator: Boring Mill Horizontal (2), Operator: Boring Mill Vertical (2), Cylindrical Grinder (1), Internal Grinder (1), Welder: Industrial (4), Welder, Class "A" (2), Layout Technician (1), Pipe Fitter (2), Tool Designer (2), Foreman (2), Trimmer Maker (1), Machine Operator (5), Operator: Forge Hammer (6), Senior Shop Labour Estimator (1), Engineer: Mechanical (1), Accountant (1), Die Repair (3), Maker: Cabinet (3), and Finisher: General (1). These firms now employ a total of 356 workers in these jobs, and they expect 33 of them to retire during the next five years.

3. Expansion Plans and Recruitment Outlook

Twenty-one respondents are planning to expand their firms during the next twelve months, and most expect to encounter difficulty in recruiting the skilled workers they need. Positions that respondents expect to be "very difficult" or "somewhat difficult" to fill in the future are Machinist, Welder, Operator: Boring Mill, Operator: Casting Machine, Lathe Hand, Grinder Hand, Die Caster, Die Sinker, Millwright, Electrician, Baker, Assembler-Fitter, Manager, Operator: Melt

Furnace, Labourer: Skilled, Lab Technician, Inspector, Electrical Mechanic, Engineer, Technologist, Tool Designer, Trimmer Maker, Sprayer: Paint, and Maker: Cabinet. Only a few positions are expected to be "easy" or "very easy" to fill: Process Worker, Labourer, Clerk: Sales, Clerk: Accounting, Fitter, Baker's Helper, and Labourer: Semi-Skilled.

The respondents in the Niagara area are using a wide variety of recruiting strategies to fill their future needs. The most popular means of recruiting are taking a skill inventory of present staff, providing apprenticeship or other on-the-job training for new employees, placing advertisements in newspapers, and placing job orders with CECs.

4. Employer Concerns and Special Problems

Several respondents from this area report a general shortage of tradesmen in the Niagara area. Many seem to believe that the education system is inadequate. An employer from Dunnville says that government training programmes are "very very insufficient for . . . small business"; another says that the education system has failed to forecast the need for skilled labour, and predicts that Canadian manufacturing will be "in serious jeopardy" if the problem is not corrected. One respondent suggests that the government should assist young people who are being trained in the trades for the full duration of their training, not just for ten months. The Government does this for our university students, why not for skilled labour?

Machinists, millwrights, maintenance mechanics, tool-makers, and product and process engineers are cited as job categories in which there are difficulties hiring qualified people.

Fanshawe College

1. Survey Results

Fanshawe College serves the major centres of London, St. Thomas, and Woodstock. The 62 respondents from this college area employ a total of 10,992 workers, 78 percent of whom work in the major centres. Thirty-seven firms employ fewer than 100 workers each, 19 employ between 100 and 499 workers each, and six employ more than 500 workers each. The 62 respondents belong to the following industry groups: Rubber and Leather Products, Textile and Clothing, Wood Products, Paper and Allied, Printing, Metal Fabricating, Machinery, Transportation Equipment, Electrical Products, Non-Metallic Mineral Products, Chemical Products, Construction, and Miscellaneous Manufacturing. Nearly one-third of these respondents belong to the Metal Fabricating and Machinery industries.

2. Current Shortages

Thirty of the 62 respondents are currently having difficulty filling a total of 149 positions in the following occupations: Accountant (1), Assembler: Production (4), Builder: Pipe Organ (3), Clerk: Accounting (4), Chemical Workers (2), Designer: Machine (1), Draftsman (3), Driver: Heavy Equipment (2), Engineer (11), Estimator (1), Foreman: Production Supervisor (1), Labourer: Unskilled (19), Machinist: General (13), Maintenance: General (5), Mechanic (3), Millwright (1), Operator: Lathe (12), Operator: Spring Machine (4), Operators (11), Quality Control: Inspector (4), Repair: Equipment (1), Salesman (1), Technician: Industrial (2), Tool-and-Die Maker (1), Tool Maker (3), Weaver (7), Welder (21), and Welder-Fitter (8). The 30 firms reporting current hiring difficulties now employ 638 workers in these positions, more than 40 percent as Machinist, Labourer: Unskilled, Operator: Lathe, and Welder. These firms expect that 49 workers, 21 of whom are unskilled labourers, will retire during the next five years.

3. Expansion Plans and Recruitment Outlook

Twenty-seven employers, fifteen of whom are experiencing shortages, plan to hire more workers during the next twelve months. Hiring is expected to be "somewhat difficult" or "very difficult" for Accountant, Analyst: Systems, Assembler: General, Assembler: Fitter, Clerk: General, Carpenter, Chemical Worker, Draftsman, Electrician, Engineer, Estimator, Fabricator, Foreman: Production Supervisor, Labourer: Skilled, Machinist: General, Manager: Administration, Millwright, Operator, Printer: Offset, Salesman, Secretary, Technician:

Industrial, Typesetter, Welder and Welder: Fitter, either because there will be no applicants for these jobs or because applicants will lack specialized skills or on-the-job experience or both.

In order to ensure that their increased manpower requirements will be met employers are taking skill inventories of their work-force, sponsoring apprenticeship or on-the-job training, advertising in newspapers, and placing job orders with CECs. The majority of employers who indicate they will consult an Ontario Government representative about training courses, use private placement agencies, recruit in schools and training institutions, and recruit in the United States and overseas plan to do so in the future.

4. Employer Concerns and Special Problems

Since responses were received only from Woodstock and London the reader should refer to the discussion of these two centres on pages 77 and 79, respectively.

St. Clair College Area

1. Survey Results

St. Clair College serves the two major centres of Windsor and Chatham. The 40 respondents from this college area employ a total of 19,044 workers. Thirty of these firms employ fewer than 99 workers each, five employ between 100 and 499 workers each, and five employ more than 500 workers each. These 40 firms belong to the following industry groups: Metal Fabricating; Primary Products; Food, Beverage and Tobacco; Transportation Equipment; Machinery; Primary Metals; Textile and Clothing; Non-Metallic Mineral Products; and Miscellaneous Manufacturing.

2. Current Shortages

Sixteen of the 40 respondents are currently having difficulty filling a total of 58 positions in the following occupations: Tool-and-Die Maker (10), Tool Maker (7), Drafter: Design (5), Foreman: Production (5), Machinist: General (5), Truck Driver (5), Engineer: Die Casting (3), Millwright (3), Operator: Sewing Machine (3), Mould Maker (2), Welder (2), and one position each for Accountant, Computer Personnel, Cement Finisher, Drafter: Die, Fabricator, Material Handler, Siding Erector, and Tool-and-Die Repair. These 16 firms now employ 172 workers in these jobs and expect at least 18 to retire during the next five years.

3. Expansion Plans and Recruitment Outlook

Seventeen employers, 11 of whom are currently experiencing shortages, are planning to expand their firms during the next twelve months, and they expect hiring for the workers they need to range from "easy" to "very difficult". Among the positions that employers expect to be "very difficult" to fill are Welder, Engineer: Research and Development, Salesman, and Millwright, all because applicants lack specialized skills and on-the-job experience, and Machinist, Tool-and-Die Maker, Engineer: Die Casting, and Mould Maker, because there are no applicants for these jobs. Positions that employers expect to be "somewhat difficult" to fill are Material Handler and Labourer: Skilled, because of the nature of the job, and Tool Maker, Fabricator, Finisher: General, Maintenance: Machine, Operator: Sewing Machine, Foreman: Production, and Analyst: Systems, because applicants lack specialized skills or on-the-job experience or both. Positions that employers expect to be "easy" to fill include: Clerk: General, Manager: Administration, Labourer, Operator: Punch Press, and Technicians.

In order to fill these positions employers now use or are planning to use advertisements in newspapers, skill inventories of their work-force, apprenticeship or other on-the-job training, consultations with Ontario Government representatives about training courses, sending company representatives to recruit in schools and training institutions, and placing job orders with CECs. Only employers in Windsor now use or plan to use private placement agencies. A very few employers report that they plan to recruit overseas or in the United States, and one employer reports that he will only do so as a last resort.

4. Employer Concerns and Special Problems

The school system is criticized by a number of respondents from this area both because it provides inadequate, unrealistic training and because it has not developed motivation among its students to undergo training for the skilled trades. A Wallaceburg employer thinks a short-term solution to the shortage of tradesmen is to give more aid to firms involved in apprenticeship training; in the long-term however, he thinks it is necessary to "change the school system." An employer in Windsor who is experiencing shortages of plastic mould makers suggests that training be started in grade 9 or 10; if training is begun after grade 12, he says, a boy "is only interested in making a fast dollar."

The percentage of trainees who become good, qualified workers appears to be small, according to two employers in this area. A Chatham employer says that sewing machine operators must be trained on the job because few are experienced; only one in five becomes a good operator, a problem he attributes to lack of motivation. A Windsor employer reports simply that he hires apprentice welders at \$3.50 an hour; within two years their wages rise to \$8.00-8.50 an hour, and only about half reach this stage.

A respondent from Leamington, like other employers in small towns, is having trouble competing with firms in larger centres. He says that he trains his own apprentices, who leave his firm upon completion of their training for work in Windsor.

Lambton College Area

1. Survey Results

The only major centre served by Lambton College is Sarnia. Fourteen firms employing a total of 6,964 workers responded from the college area; over 64 percent of the firms and 85 percent of the employees are in Sarnia itself. The respondents represent the Petroleum and Coal Products, Chemical and Chemical Products, Primary Metals, Metal Fabricating, Non-Metallic Mineral Products, and Textiles and Clothing Industries.

2. Current Shortages

Seven of the 14 responding firms are currently facing shortages in a total of 47 positions in the following occupations: Engineer: Chemical (10), Engineer: Electrical (3), Engineer: Industrial (1), Engineer: Process (2), Engineer: Research and Development (3), Accountant (4), Electrician: Industrial (4), Mechanic: Machine (1), Millwright (4), Repair: Pattern (3), Technologist: Electrical (3), Mechanic: Control (3), Mechanic: Heavy Equipment (1), Buyer (3), Industrial Hygienist (1), and Foreman: Production Supervisor (1). The majority of these openings are in Sarnia, though it is interesting to note that most of the shortages for Mechanics are in the outlying areas.

The firms reporting these shortages now employ 136 people in these positions, and expect that eight employees will retire during the next five years.

3. Expansion Plans and Recruitment Outlook

Four employers, two in Sarnia and two elsewhere, plan to expand their firms during the next twelve months. They expect it to be "very difficult" or "somewhat difficult" to hire suitable people as Engineer: Chemical, Technologist: Electrical, Mechanic: Control, Mechanic: Heavy Equipment, Engineer: Control, Mechanic: Instrument, Engineer: General, and Accountant. One employer from the Petroleum and Coal Products Industries in Sarnia expects it to be "easy" or "very easy" to hire people as Engineer: Chemical, Engineer: Electrical, and Engineer: Mechanical, but this employer, unlike most, is looking for new graduates without previous work experience. Only Sarnia employers list any jobs as "easy" or "very easy" to fill; those outside Sarnia believe that it will be "very difficult" or "somewhat difficult" to fill the openings their expansions plans will create.

Respondents report that they are using a wide variety of strategies to recruit the new workers they need. The predominant recruiting methods are placing advertisements in newspapers and placing job orders with private agencies.

4. Employer Concerns and Special Problems

The responses from this area show that maintenance staff, engineers, chemists, and instrument or electrical technologists are especially difficult to find. Accountants, personnel specialists, and other professionals with "portable" skills are difficult to hire, largely because they prefer the urban areas of the province.

One foundry owner in Sarnia reports great difficulty in getting millwrights, electricians, and pattern repairmen, a problem aggravated by the stringent requirements of the current collective agreement at his firm. Another employer says that steel fitters, layout men, and welders have been in constant shortage for the past five years, and that "trial and error" is the only way of finding good workers. A Corunna employer who has had trouble finding maintenance personnel for several years suggests that the situation "can be greatly improved through comprehensive apprenticeship programmes in the manufacturing sector."

Conestoga College Area

1. Survey Results

Conestoga College serves the major centres of Kitchener/Waterloo, Cambridge, Guelph, and Stratford. The 95 respondents from this college area employ a total of 17,212 workers, 91 percent of whom work in the major centres. Fifty-three of the firms employ fewer than 99 workers each, 31 employ between 100 and 499 workers each, and 11 firms employ more than 500 workers each. The 95 firms represent the following industry groups: Food, Beverage and Tobacco, Rubber and Leather, Textiles and Clothing, Wood Products, Paper and Allied, Printing and Publishing, Primary Metals, Metal Fabricating, Machinery, Transportation Equipment, Electrical Products, Non-Metallic Mineral Products, Chemical Products, Construction, and Miscellaneous Manufacturing.

2. Current Shortages

Fifty of the 95 respondents are currently having difficulty filling a total of 334 positions in the following occupations: Analyst: Systems (40), Apprentice Welder (2), Assembler: Equipment (1), Assembler: Machine (11), Buyer (2), Computer Personnel (2), Electrician: General (1), Electrician: Electronic (5), Electrician: Wirer (8), Engineer: Chemical (3), Engineer: Electrical (32), Engineer: Industrial (3), Engineer: Mechanical (2), Engineer: Production (1), Engineer: Stationary (1), Fabricator: General (1), Finisher: Drywall (1), Foreman: Production (8), Inventory: Material Control (1), Labourer: Semi-Skilled (16), Labourer: Skilled (6), Layout: Welding (5), Machinist: General (41), Maintenance: General (1), Maintenance: Machine (5), Mould Maker (2), Manager: Administration (2), Mechanic: Equipment (5), Mechanic: Machine (6), Machine Operators (3), Operator: Sewing (21), Operator: Lathe (2), Operator: Milling Machine (2), Operator: N.C. Machine (4), Operator: Press (4), Pattern Maker (2), Planner: General (1), Quality Control: Inspector (3), Shoemaker (1), Sprayer: Paint (1), Technologist: Industrial (2), Tool-and-Die Maker (11), Tool Maker (1), Welder (4), Welder: Industrial (27), and Welder: Fitter (30). The 50 firms reporting current hiring difficulties now employ 1,142 workers in the occupations identified, more than 50 percent as Labourer: Unskilled, Operator: Sewing, Machinist: General, Engineer: Electrical, and Welder: Fitter, and they expect that 48 workers will retire during the next five years.

3. Expansion Plans and Recruitment Outlook

Fifty employers, 30 of whom are now experiencing shortages, are planning to expand their firms during the next twelve months. Among the positions that they expect to be "somewhat difficult" or "very difficult" to fill are Apprentice, Assembler: General, Assembler: Fitter, Carpenter, Cutter, Draftsman, Electrician, Engineer, Estimator, Fabricator: General, Fabricator: Sheet Metal, Finisher, Foreman: Production, Grinder, Labourer: Unskilled, Semi-Skilled and Skilled, Machinist: General, Maintenance: General, Cabinet Maker, Pattern Maker, Tool Maker, Parts Maker, Tool-and-Die Maker, Manager: Administration, Mechanic, Millwright, Machine Operator, Operator: Knitting/Sewing, Operator: Spring Machine, Quality Control: Inspector, Salesman, Shoemaker, Paint Sprayer, Technician, Technologist, Upholsterer, Welder, and Welder: Fitter. These positions are expected to be difficult to fill because either there will be no applicants at all or applicants will lack the academic training, specialized skills, or on-the-job experience or a combination of these skills and experience to perform the job.

In order to fill these positions many firms now use or are planning to use the following strategies: advertisements in newspapers, skill inventories of their work-force, consultations with an Ontario Government representative about training courses, job orders with CECs and apprenticeship or on-the-job training. Only a few firms expect to place job orders with private agencies, recruit in schools and training institutions, and recruit in the United States or overseas.

4. Employer Concerns and Special Problems

Comments were received only from employers in Guelph, Kitchener-Waterloo, and Cambridge. The reader should consult the responses from these individual centres, reported on pages 47, 50-51, and 54, respectively.

Georgian College Area

1. Survey Results

The only major centre served by this college is Barrie. Thirty-six firms employing a total of 3,876 workers responded to the survey from this area. Most of the respondents are in either Barrie or Orillia, though about half of the returns came from a large number of outlying towns, including Midland and Owen Sound.

The responding firms are mostly small: 22 firms employ fewer than 100 workers each, 13 employ between 100 and 499 each, and only one firm has more than 500. The Metal Fabricating and Machinery Industries are the most heavily represented in the survey returns, though Electrical Products, Wood, and Food, Beverage and Tobacco Industries are also well-represented. Responses were also received from firms in the Rubber and Leather, Primary Metals, Transportation Equipment, and Chemical Products Industries.

2. Current Shortages

Thirteen respondents from this college area are experiencing difficulty filling a total of 36 positions in the following occupations: Assembler: General Production (6), Machinist: General (6), Engineer: General (2), Layout: General (2), Maintenance: General (2), Millwright: Industrial (2), Operator: Other (2), Welder: Industrial (2), and one position each for Clerk: Accounting and Sales/Shipping; Electrician: Industrial; Engineer: Mechanical, Production, and Stationary 4th Class; Foreman: Production Supervisor; Manager/Administrator; Operator: Vacuum Forming; Printer: Offset; Quality Control: Inspector; and Technologist: Industrial. These firms currently employ a total of 191 workers in the shortage occupations. Sixty of these, or roughly one-third, are Assemblers and 38 are Machinists. Eight of these workers are expected to retire during the next five years.

3. Expansion Plans and Recruitment Outlook

Sixteen of the 36 responding employers plan to expand their firms in the next twelve months, and all but two expect to encounter trouble filling the new positions they will create. Two or more respondents expect it to be "very difficult" or "somewhat difficult" to fill each of the following jobs: Assembler: General Production; Machinist: General; Operator: Press/Brake/Punch; Printer: Offset; Salesman: General; and Welder: Industrial. Each of the following is named by one employer as "somewhat difficult" or "very diffi-

cult" to fill: Cutter: Glass; Engineer: Mechanical, Production, and Research and Development; Foreman: Production Supervisor; Tool-and-Die Maker; Mechanic: Maintenance; Operator: Furnace/Temper and Knitting/Sewing; Technologist: Electronic and Industrial; Troubleshooter: Machine; Welder-Fitter; Assembler: Electronic; Drafter-Design: General; Labourer: Semi-Skilled; Operator: Coating/Plating, Grinder, Lathe-All types, and Ram Straightener; Quality Control: Inspector; Repair: Die; Technician; Electronic; and Typesetter.

Only a few jobs are thought to be "easy" or "very easy" to fill: Inventory: Material Control; Labourer: Unskilled and Skilled; and Sprayer: Paint. Quite a few respondents attribute their expected difficulties in recruiting to a lack of the right combination of specialized skills and on-the-job experience in potential applicants for these jobs. This problem is cited in the case of Labourer: Semi-Skilled; Machinist: General; Tool-and-Die Maker; Operator: Coating/Plasting, Grinder, Lathe-All types, and Ram Straightener; Repair: Die; Troubleshooter: Machine; Typesetter; Welder: Industrial; and Welder-Fitter. Applicants for other positions are expected to lack on-the-job experience and in a number of cases no applicants at all are expected.

The most popular recruiting strategies in current use among respondents from this area are taking a skill inventory to see if their skill needs can be met by training current staff and giving apprenticeship or other on-the-job training to new employees; nine respondents each are using these strategies. Eight respondents are placing job orders with CECs; six each are consulting Ontario Government representatives to get assistance in setting up training courses, and placing advertisements in newspapers. Much less common is recruiting overseas or in the U.S., though at least two employers plan to use this strategy in the future. Sending a company representative into schools to recruit and placing advertisements with private agencies are strategies pursued by only one employer each.

4. Employer Concerns and Special Problems

The main concern of respondents from this area is the need to upgrade training. An Owen Sound employer says that high school graduates lack basic math and blueprint-reading abilities, and another from Orillia says that most young people lack formal education or training of any kind, drifting from job to job until they end up on UIC. Though two employers are quite happy with the graduates from the local community college, one dissatisfied respondent from Midland says that apprenticeship programmes for all recognized trades

should be set up by the provincial government. A Bracebridge respondent says that existing government programmes are poor, in particular the CECs. He also notes that the generally low wages in Muskoka make it difficult to attract workers to that area.

Experienced welders, machinists, draftsmen, screw machine operators, and operators for the plastics extrusion industry are jobs in which shortages are especially crippling.

Cambrian College Area

1. Survey Results

Sudbury is the only major centre served by Cambrian College. The seven respondents from this college area employ a total of 13,909 workers, 99 percent of whom work in Sudbury itself. Three firms have more than 100 employees each, including one that has over 13,000. The remaining four firms have fewer than 50 workers each. These firms represent the Machinery, Metal Fabricating, Mining, Primary Metal, and Food and Beverage Industries.

2. Current Shortages

Five of the seven respondents are currently having difficulty filling a total of eleven positions in the following occupations: Welder (3), Plateworker (2), Operator: Milling Machine (2), Baker (2), Foreman (1), and Machinist (1). These four firms now employ 15 persons in these jobs, none of whom are expected to retire during the next five years.

3. Expansion Plans and Recruitment Outlook

Five of the seven respondents are planning to expand their firms during the next twelve months. They expect hiring to be "somewhat difficult" or "very difficult" for Hydraulic Mechanic, Materials Coordinator, Machinist, Welder, Layout Person, Secretary, Baker, Bakery Helper, and Plateworker.

A lack of on-the-job experience is cited as the reason for difficulty in hiring Machinist, Materials Coordinator, and Hydraulic Mechanic. A lack of specialized skills is the main reason for anticipated difficulty in hiring a Layout Person and a Welder.

In order to fill these positions most employers will continue providing apprenticeship training for new employees. One respondent plans to take out advertisements in newspapers, recruit from private and public agencies, and attract employees from competitors by offering higher wages and benefits. Two respondents expect to recruit overseas in the near future, although neither is currently doing so.

4. Employer Concerns and Special Problems

The responses from employers in Sudbury have already been discussed (see page 92). Two other responses to this question

were also received from other areas served by Cambrian College. One employer complains of persistent shortages of skilled workers and says that the lack of prestige accorded to tradesmen in our society and the emphasis placed on university education contribute to these shortages. He also says that apprenticeship programmes are too restrictive in scope and should be modelled after the British or European systems. Another response is from an employer in Kapuskasing who says that business incentive loans have the potential to create more jobs, but that these loans are difficult to get.

Northern College Area

1. Survey Results

Timmins is the only major centre served by Northern College. Four firms employing a total of 125 workers, 86 percent of whom work outside Timmins responded to the survey from this college area. Only one of these firms employs more than 50 workers. These four firms represent the Food and Beverage, Logging, Miscellaneous Manufacturing, and Printing Industries.

2. Current Shortages

Two of the four respondents are currently having recruitment difficulties. They are trying to fill a total of six positions in the following occupations: Printer: Offset (1), Accountant (1), Salesman: General (1), and Operator: Heavy Equipment (3). These firms now employ 12 workers in these occupations and none are expected to retire during the next five years.

3. Expansion Plans and Recruitment Outlook

None of the respondents from this college area are planning to expand their employment during the next twelve months.

4. Employer Concerns and Special Problems

No responses to the open-ended question were received from employers in the Northern College area.

Canadore College Area

1. Survey Results

North Bay is the only major centre served by Canadore College. The four respondents from this college area employ a total of 137 workers, 73 percent of whom work outside North Bay itself. Only one firm has more than 50 employees. These firms represent the Electronics, Printing, Wood, and Lumber Industries.

2. Current Shortages

Three of the four respondents are experiencing shortages of skilled workers. They are trying to fill a total of 12 positions in the following occupations: Salesman: General (4), Manager: Administrator (2), Industrial Maintenance Technician (2), Industrial Installation Technician (2), Inventory/ Material Controller (1), and Heavy Equipment Operator (1). These firms now employ 21 persons in these jobs and expect only one to retire during the next five years.

3. Expansion Plans and Recruitment Outlook

The only respondents who plan to expand their firms are located in North Bay. Please see page 89 for the results.

4. Employer Concerns and Special Problems

The only respondents who expressed special concerns are from North Bay. Please see page 90 for their comments.

Sault College Area

1. Survey Results

The major centre in the Sault College Area is Sault Ste. Marie. In total, thirteen firms employing 12,810 workers responded to the survey from this College area.

The Sault city returns make up 77 percent of all college area respondents and 90 percent of employment of all respondents. Respondents represented the following industries: Primary Metal, Mining, Food and Beverage, Construction, Printing, Wood, Metal Fabricating, and Furniture.

2. Current Shortages

Eight of the thirteen respondents are currently experiencing shortages of skilled tradesmen; they are attempting to fill 69 positions in the following occupations: Pipefitter (5), Labourer (12), Machinist (7), Ironworker (8), Welder (7), Wireman (6), Rigger (4), Heavy Equipment Mechanic (4), Maintenance Mechanic (2), Millwright (2), Electrician (1), Air Conditioning Repair (1), Patternmaker (1), Instrument Repair (1), Sheetmetal Apprentice (1), Foreman (1), Manager (1), Butcher (1), Machinist: General (1), Printing Layout Artist (1), Advertising Sales (1), and Compositor (1).

The firms reporting these shortages employ 1,547 people in these positions, and they expect 79 to retire during the next five years.

3. Expansion Plans and Recruitment Outlook

Nine firms plan to expand employment during the next year. Most of the new positions are expected to be "somewhat difficult" or "very difficult" to fill. In addition to the occupations mentioned above, employers also identified Boilermaker and Bricklayer as shortage occupations, the latter being considered "easy" to fill.

The recruitment strategy mentioned most often in this college area is apprenticeship or other on-the-job training for new employees. Placing advertisements in newspapers and placing orders with CECs are also considered important, and employers are now using these methods to recruit workers. Other methods in use here include sending company representatives to schools and training institutions and consulting an Ontario Government representative or seeking manpower assistance. One employer will attempt to meet his future needs by retiring older workers and by attempting to hire skilled labour by "whatever means are necessary or possible."

4. Employer Concerns and Special Problems

The poor attitudes of most potential employees, even during interviews, is one of the main concerns among respondents from this area. One employer reports that because of a high rate of illiteracy and a general unwillingness to perform satisfactorily he has had bad luck with training programmes for young people. The same employer believes that workers want to do very little work and expect to receive a lot in return. Another says that he is seeking help from the local Industrial Training Council to eliminate a shortage of machinists.

Confederation College Area

1. Survey Results

Thunder Bay is the only major centre served by Confederation College. The eight respondents from this college area employ a total of 521 workers, 62 percent of whom work in Thunder Bay itself. The respondents represent the Metal Fabricating, Wood, Printing, Food and Beverage, and Mining Industries.

2. Current Shortages

Seven of the eight respondents are currently experiencing shortages of skilled workers. They are trying to fill at least 13 positions in the following occupations: Welder: Fitter (2), Layout: Fitter (2), Welder: Pressure (1), Inspector: Quality Control (1), Mechanic: Class "A" (1), Printer: Industrial (1), Sprayer: Paint (1), Miner (1), Mill Operator (1), Mechanic: Heavy Equipment (1), and Millwright (1). At least 18 workers are presently employed by these firms in the shortage occupations, and none are expected to retire during the next five years.

3. Expansion Plans and Recruitment Outlook

Four respondents, all currently experiencing shortages, intend to hire more workers during the next twelve months to accommodate a planned expansion. Those positions that are expected to be "somewhat difficult" to fill are Machinist" General, Mechanic: Class "A", Assembler: Fitter, Welder: Fitter, Welder: Industrial, Printer: Industrial, Miner, and Mill Operator. Those considered "very difficult" to fill are Welder: Layout, Inspector: Quality Control, Sprayer: Paint, Mechanic: Heavy Equipment, and Millwright.

4. Employer Concerns and Special Problems

Although Confederation College serves all of Northwestern Ontario, responses were received only from employers in the Thunder Bay area. These responses are reported on page 97.

APPENDIX

THE SURVEY QUESTIONNAIRE

About this survey ...

The purpose of this survey is to collect information that would facilitate the development and utilization of our human resources more effectively. This questionnaire has been designed to gather information about the problems you may be having in hiring personnel and about your firm's future manpower requirements. The results of the survey for your firm if you authorize us to do so will be included in the tabulations, by community and by industry sectors and will be sent to you.

Some employers have plants in more than one location. In order to obtain results by community, we need information about each plant. For this reason we are requesting those of you who have two or more plants to fill out a separate questionnaire for each. The mailing list we have used did not specify whether your company has one or more plants and consequently we were unable to send you the appropriate number of copies of the questionnaire. We will be grateful if you would reproduce the number of copies you need and send one to each of your plants in Ontario. Please complete page one of the questionnaire *before* doing so. The completed forms should be mailed to the address given below.

The questionnaires for this survey have been mailed by the Canadian Manufacturers Association and the Canadian Federation of Independent Business to their members. If your company belongs to both of these organizations, then you probably will receive two copies of this questionnaire. We apologize for the duplication and ask you to respond to only one request.

If you have any questions or need help in completing the questionnaire, please call Mrs. Ieva Kravis collect at (416) 965-2820 or Ms. Maggie Smiley at (416) 965-6101 in Toronto.

Please return your completed questionnaire by July 16, 1979, to:

Ontario Division
The Canadian Manufacturers' Association
One Yonge Street
Toronto, Ontario
M5E 1J9

Thank you for your support and cooperation.

June 1979

Manpower Requirements and Hiring Plans

Please provide the information requested on this page before completing the attached questionnaire.

Is your company a multi-plant firm?

Yes

No;

if No, please go directly to the attached questionnaire.

II If Yes, please list below the names and addresses of all your plants in Ontario.

Name of plant

Address

III Please complete one copy of the following questionnaire for the head office and forward one copy to each of the plants you have identified above. It is important that the information about skill requirements and hiring plans be provided

separately for each location. Since we did not know the number of plants you have, we have not provided you with extra copies of the questionnaire. Please reproduce the necessary copies and forward them to the appropriate person at each plant.

Manpower Requirements and Hiring Plans

1

Please provide the following information about your company:

A Name of firm/plant _____

B Address _____

C Industry _____

D Major product lines _____

E Total number of employees (both administrative and production) at this location _____

F Name, position and telephone number of respondent _____

G Name and address of head office if part of multi-plant firm

2

Would you please list the associations or other industry groups of which your firm is a member:
e.g., Canadian Manufacturers Association, Electrical and Electronic Manufacturers Association of

Canada, Canadian Federation of Independent Business, Hamilton Industrial Training Advisory Committee, etc.

3

Confidentiality. The information you provide us in this survey will be treated in a confidential manner. Under no circumstances will information about

your firm be made available to other parties unless you give us authorization below:

A The information we are collecting in this questionnaire is required for planning purposes by many groups. For example, community and industry leaders need this information to plan training

Community Level Yes, we object
Industry Sector Level Yes, we object
Trade Association Level Yes, we object

programs and meet community needs. Would you object if we included the information you give us in summaries of the results at:

No, we do not object
 No, we do not object
 No, we do not object

B In some communities, local community groups may also be collecting similar information for developing training programs, e.g. the Hamilton Industrial Training Advisory Committee. Would you object if

Yes, we object

we sent a copy of your completed questionnaire (without your name and address) to such a group in your area to minimize the burden on your firm of providing the same type of data to different groups.

No, we do not object

C Would you object to making your completed questionnaire available to other Ontario Government Ministries and Federal Government Departments

Yes, we object

involved with Manpower and Training activities, such as the Ministry of Education and Canada Employment and Immigration Commission?

No, we do not object

4

Have you been experiencing any difficulties in hiring personnel over the *last four weeks*? Please

Yes

include all levels from unskilled to professional staff.

No;
if No, please go to Question 6.

5

If Yes, please provide the following information in the Table on the next page for those jobs you had

trouble filling during the *last four weeks*.

A In Column A, list the jobs and briefly describe work content, responsibilities, or special skills. As much as possible, use position titles most widely

understood in your industry and by employment agencies.

B In Column B, indicate the type of work, i.e., Administrative, Production, or Maintenance, of these jobs.

C In Column C, indicate the minimum acceptable qualifications required for these jobs: years of

formal schooling, specialized skill training and on-the-job experience.

D In Column D, indicate how many workers you are trying to hire for each of these jobs.

E In Column E, indicate the range of hourly wage rates offered for these positions. (For salaried positions, specify weekly or monthly rates.)

F In Column F, indicate the number of people currently employed in each of these jobs. Please do

not include workers you are not attempting to hire as identified in Column D.

G In Column G, indicate how many of the people currently employed in each of these jobs you expect to retire during the next five years.

Information about jobs with hiring difficulties during the last four weeks

Work experience beyond specialized training

6

Over the next 12 months, will you be expanding your total employment (both administrative and production)?

Yes

No;

if No, please go to Question 10.

7

If Yes, for which **new** jobs will you be hiring over the next 12 months?

A In Part A of the Table below, list the jobs and briefly describe work content, responsibilities or special skills. As much as possible, use position titles most widely understood in your industry and by employment agencies.

B In Part B, indicate with a check mark (✓) the degree of hiring difficulty you are anticipating for each of these new positions.

8

For the jobs identified in Question 7, where hiring may be *somewhat difficult* or *very difficult*, please

check (✓) in the Table below the *main* reason(s) why you anticipate difficulties.

Work experience beyond specialized training

9

For the jobs identified in Question 8, please check the statement(s) in the table below that best des-

cribe your current and future actions to ensure that your increased manpower requirements will be met.

Actions	<input type="checkbox"/> Current action	<input type="checkbox"/> Future action
Take skill inventory of present staff to see whether specific requirements can be met internally <i>without</i> additional on-the-job training;	<input type="checkbox"/> Current action	<input type="checkbox"/> Future action
Take skill inventory of present staff to see whether the specific requirements can be met internally <i>with</i> on-the-job training;	<input type="checkbox"/> Current action	<input type="checkbox"/> Future action
Provide apprenticeship and/or other on-the-job training for <i>new</i> employees;	<input type="checkbox"/> Current action	<input type="checkbox"/> Future action
Recruit overseas or initiate off-shore hiring process;	<input type="checkbox"/> Current action	<input type="checkbox"/> Future action
Recruit in United States;	<input type="checkbox"/> Current action	<input type="checkbox"/> Future action
Send company representative to recruit in schools and training institutions in the community;	<input type="checkbox"/> Current action	<input type="checkbox"/> Future action
See an Ontario government representative about setting up training or seek other manpower assistance;	<input type="checkbox"/> Current action	<input type="checkbox"/> Future action
Place newspaper advertisement in the "Help-Wanted" Sections;	<input type="checkbox"/> Current action	<input type="checkbox"/> Future action
Place job orders with a private placement agency;	<input type="checkbox"/> Current action	<input type="checkbox"/> Future action
Place job orders with Canada Employment Centres;	<input type="checkbox"/> Current action	<input type="checkbox"/> Future action
Other	<input type="checkbox"/> Current action	<input type="checkbox"/> Future action

10

Do you feel the information you have supplied us in this questionnaire reflects all your major concerns about your skill requirements and hiring plans? If

not, we would appreciate your suggestions and comments in the space below.

Thank you for taking the time to complete this questionnaire.



